[Entered at the Post Office at St. Louis, Mo., as Second Class Mail Matter.]

Contents on Colored Page IX.

Vol. XLV. No. 1.

July, 1883.

THE SAINT LOUIS

Medical and Surgical Journal.

LIBRARY

[ESTABLISHED 1843.]

THOS. F. RUMBOLD, M. D., Editor and Proprietor.
3622 Washington Avenue. St. Louis, Mo.

Terms: $3.00 per Annum IN ADVANCE. Single Copies 30 Cents.

Complete Index to Advertisements on Colored Page, X.

Recent Medical Publications by The Medical Journal Publishing Company.

1225 Washington Avenue. Saint Louis.

The attention of the profession is called to the facilities of this House for Publishing Medical Works. All Books Published by them, are advertised gratis in the JOURNAL for one year.

Proceedings of the St. Louis Medical Society for 1878, pp. 200, 11 Illustrations. $2.00. For the year 1879, pp. 296 Ill. $2.00 For the year 1880, pp. 355 $2.25. For the year 1881, pp. 420. $2.50. For the year 1882, pp. 449. $2.50. For the five years, $8.00; all in paper binding.

There is more instructive reading that is suited to the busy practitioner, in these five volumes, than can be found in the same number of pages of any work now published. Every subject is a practical one, and has occurred in the speaker's practice. They are discussed and criticised by quite a number of well informed and experienced physicians, thus presenting several views, and giving the reader a choice of conclusions.

Fracture of the Femur. By EDW. BORCK, M. D. (The third Edition is now in Preparation.)

Paresis of the Sympathetic Centers. CHARLES T. REBER, M. D. pp. 116. $1.00

Yellow Fever. By a Special Committee of the St. Louis Medical Society. DR. W. HUTSON FORD, Chairman. 8vo pp. 328; 5 Lithographic Plates, two of which are 9 by 24 inches and over 120 valuable Statistical and Meteorological Tables bound in fine muslin with beveled edge cover. $1.50.

"We cannot but believe that such careful studies will ultimately give the mastery of the disease."—*Medical and Surgical Reporter*

Hygiene of Catarrh. By THOS. F. RUMBOLD, M. D. Second Edition with 16 Illustration, pp. 190. $1.50. This book, a guide for every day life of those who every now and then take colds. It is the product of the Author's experience after twenty years observation on this subject.

"This is a semi-popular and readable little work upon the proshylaxis and treatment of a common cold. The book is well planned."—*London Lancet.*

Treatment of Catarrh. By THOS. F. RUMBOLD, M. D. with 30 Illustrations. pp, 310. $2.50.

"It contains full directions concerning the instruments which are requisite and the procedures to be adopted in all the various disorders of a catarrhal nature involving the nares, fauces and aural passages."—*Canada Med. and Surg. Jour.*

Hygiene and Treatment of Catarrh. By THOS. F. RUMBOLD, M. D., with 46 Illustrations, pp. 474. $4.00.

"It contains very much important and practical information, that cannot be found elsewhere."—*Cincinnati Med. News.*

FOR SALE BY THE PUBLISHERS AND BY BOOKSELLERS.

TO THE MEDICAL PROFESSION.

LACTOPEPTINE

DEMONSTRATED SUPERIORITY OF LACTOPEPTINE AS A DIGESTIVE AGENT.

Certificate of Composition and Properties of Lactopeptine by Prof. ATTFIELD, Ph.D., F.R.S., F.I.C., F.C.S., Prof. of Practical Chem. to the Phar. Society of Great Britain.

LONDON, May 3rd., 1882.

Lactopeptine having been prescribed for some of my friends during the past five years—apparently with very satisfactory results—its formula, which is stated on the bottles, and its general characters, have become well known to me. But recently the manufacturer of this article has asked me to witness its preparation on a large scale, to take samples of its ingredients from large bulks and examine them and also mix them myself, and to prepare *Lactopeptine* from ingredients made under my own direction doing all this with the object of certifying that *Lactopeptine* is what its makers professes it to be, and that its ingredients are in quality the best that can be obtained. This I have done, and I now report that the almost inodorous and tasteless pulverulent substance termed *Lactopeptine* is a mixture of the three chief agents which enable ourselves and all animals to digest food. That is to say, *Lactopeptine* is a skilfully prepared combination of meat-converting, fat-converting and starch-converting materials, acidified with those small proportions of acid that are always present in the healthy stomach; all being disseminated in an appropriate vehicle, namely, powdered sugar of milk. The acids used at the factory-lactic and hydrochloric—are the best to be met with and are perfectly combined to form a permanent preparation; the milk sugar is absolutely pure; the powder known as "diastase" or starch-digesting (bread-, potato-, and pastry-digesting) material, as well as the "pancreatin," or fat-digesting ingredients, are as good as any I can prepare; while the pepsin is much superior to that ordinarily used in medicine. Indeed, as regards this chief ingredient, pepsin, I have only met with one European or American specimen equal to that made and used by the manufacturer of *Lactopeptine*. A perfectly parallel series of experiments showed that any given weight of acidified pepsin alone, at first acts somewhat more rapidly than *Lactopeptine* containing the same weight of the same pepsin. Sooner or later, however, the action of the *Lactopeptine* overtakes and outstrips that of pepsin alone, due, no doubt, to the meat-digesting as well as the fat-digesting power of the pancreatin contained in the *Lactopeptine*. My conclusion is that *Lactopeptine* is a most valuable digesting agent, and superior to pepsin alone.

JOHN ATTFIELD.

LACTOPEPTINE contains all the agents of digestion that act upon food, from mastication to its conversion into chyle, thus combining all the principles required to promote a Healthy Digestion.

One of its chief features (and the one which has gained it a preference over all digestive preparations is), that it precisely represents in composition the natural digestive juices of the stomach, pancreas and salivary glands and will therefore readily dissolve all foods necessary to the recuperation of the human organism.

FORMULA OF LACTOPEPTINE.

Sugar of Milk.....40 ounces.	Veg. Ptyalin or Diastaes..4 drachms.
Pepsin.....8 ounces.	Lactic Acid.....5 fl. drachms.
Pancreatine.....6 ounces.	Hydrochlori Acid.....5 fl drachms

LACTOPEPTINE is sold entirely by Physicians' Presriptions, and its almost universal adoption by physicians, is the strongest guarantee we can give that its therapeutic value has been most thoroughly established.

The undersigned having tested LACTOPEPTINE, recommend it to the profession.

ALFRED L. LOOMIS, M. D., *Prof. of Pathology and Practice of Med., University of the City of New York.*

SAMUEL R. PERCY, M. D., *Prof. Materia Medica, New York Medical College.*

F. LE ROY SATTERLEE, M. D., *Ph. D. Professor Chem., Mat., Med. and Therap. in N. Y. College of Dent.; Prof. Chem and Hyg. in Am. Vet. Col., etc.*

JAS. AITKIN MEIGS, M. D., Philadelphia, Pa., *Prof. of the Institutes of Med. and Med. Juris, Jeff. Med. College; Phy. to Penn. Hospital.*

W. W. DAWSON, M. D., Cincinnati, Ohio, *Professor Prin. and Prac. Surg., Med. Col. of Ohio; Surg. to Good Samaritan Hospital.*

ALFRED F. A. KING, M. D., Washington, D.C. *Prof. of Obstetrics, University of Vermont.*

D. W. YANDELL, M. D., Pro. *of the Science and Art of Surg. and Clinical Surg., University of Louisville, Ky.*

L. P. YANDELL, M. D., *Prof. of Clin. Med., Diseases of Children, and Dermatology, University of Louisville, Ky.*

ROBT. BATTEY M. D., Rome, Ga., *Emeritu-Prof. of Obstetrics, Atlanta Med. College, Ex-President Med. Association of Ga.*

CLAUDE H. MASTIN, M. D., LL. D., Mobile, Ala.

PROF. H. C. BARTLETT, Ph. D., F. C. S., London, Eng.

PROF. JOHN ATTFIELD Ph. D., F. R. S., F. I. C., F. C. S., London, Eng., *Prof. of Prac. Chem. to the Pharmaceutical Society of Great Britain.*

For further particulars concerning Lactopeptine, the attention of the Profession is respectfully directed to our 52-page Pamphlet, which will be sent on application.

THE NEW YORK PHARMACAL ASSOCIATION,

Nos. 10 & 12 COLLEGE PLACE, NEW YORK.

P. O BOX 1574.

ST. LOUIS MEDICAL COLLEGE.

Cor. Seventh and Myrtle Streets.

FACULTY.

A. LITTON, M. D.,
Professor of Chemistry and Pharmacy.

J. B. JOHNSON, M. D.
Professor of the Principles and Practice of Medicine.

E. H. GREGORY, M. D.,
Professor of the Principles and Practice of Surgery and Clinical Surgery

J. T. HODGEN, M. D., *
Professor of Surgical Anatomy, Special Fractures and Dislocations, and Clinical Surgery at the City Hospital.

J. S. B ALLEYNE, M. D., Dean.
Professor of Therapeutics and Materia Medica, and Diseases of Children.

E. F. SMITH, M. D.,
Professor of Clinical Medicine and Pathological Anatomy.

L. CH. BOISLINIERE, M. D.,
Professor of Obstetrics.

G. BAUMGARTEN, M. D.,
Professor of Physiology.

H. H. MUDD, M. D.,
Professor of Anatomy and Clinical Surgery at the City Hospital.

* Deceased.

H. H. MUDD, M. D.,
Demonstrator of Anatomy.

JOHN GREEN, M. D.,
Lecturer on Ophthalmology.

W. L. BARRET, M. D.,
Lecturer on Diseases of Women.

J. M. SCOTT, M. D.,
Lecturer on Clinical Medicine.

G. A. MOSES, M. D.,
Lecturer on Gynæcology.

N. B. CARSON, M. D.,
Assistant to the Chair of Surgery.

W C. GLASGOW, M. D.
Clinical Lecturer on Physical Diagnosis.

W. E. FISCHEL, M. D.,
Lecturer on Therapeutics.

J. FRIEDMAN, M. D.,
Demonstrator of Chemistry

EDWARD EVERS, M. D,
Lecturer on Histology.

R. LUEDEKING, M. D.,
Lecturer on Pathological Anatomy.

J. P. BRYSON, M. D.,
Lecturer on Diseases of the Genito-Urinary Organs.

W. A. McCANDLESS, M. D.

FRANK R. FRY, M. D.,
Assistant Demonstrators of Anatomy.

THE FORTY-FIRST REGULAR SESSION will begin on Monday, Sept. 26, 1882, and continue until March 1st, 1883.

There will be no preliminary lectures. The course of studies extends over a period of three years and is a graded one, the voluntary three-term course formerly offered to the student, having become obligatory. Preliminary examinations will henceforth be required from all the students entering the College in all the branches of a good English education; where a Diploma or certificate of graduation from a literary or scientific college or high school is presented, this will exempt from the examination.

Practical work in the anatomical rooms and in the chemical laboratory is obligatory. Special lectures on Histology, Pathological Anatomy, Ophthalmology, Diseases of Women, of the Larynx, of the Genito-Urinary Organs have been added to the regular curriculum.

The Dispensary in the new building on the College grounds affords increased clinical facilities.

FEES.

Matriculation fee (paid but once) ..... $ 5 00

Fee for each winter term, including graduation and all other fees ..... $ 90 00

For the Annual Circular, or any information, call upon or address the Dean, No. 3132 Washington Avenue.

J. S. B. ALLEYNE, M. D., Dean.

QUINQUINIA.

Manufactured by CHARLES T. WHITE & Co., New York.

The Alkaloids of Chinchona Bark before Isolation—Fifteen per cent. of Quinia; fifteen per cent. Quinidia; fifteen per cent. Cinchonidia; twenty-five per cent. Chinchonia and thirty-five per cent. of Chinoidine (purified Alkaloid.)

ELIXIR QUINQUINIA,

(One Grain in each Fluid Drachm.)

COMPRESSED TABLETS OF QUINQUINIA,

(In Two and Five Grain Tablets.)

ELIXIR QUINQUINIA, IRON AND STRYCHNIA,

(One Grain Quinquinia, Two Grains Iron, One-sixtieth Grain Strychnia in each Drachm.)

Manufactured by JOHN WYETH & BROTHER, Philadelphia.

We ask the attention of physicians to this natural combination of the alkaloids of Cinchona Bark, having satisfied ourselves that it actually possesses the properties and advantages, claimed by Charles T. White & Co., the chemists, who manufacture it and brought it to the notice of medical men. It has been long used in hospital, dispensary and private practice, with uniformly good results, the pamphlets they issue giving many testimonials to that effect, from leading physicians in the United States. The experience of these physicians, whose published statements in regard to its antiperiodic and tonic effects, are so satisfactory, is daily confirmed by letters received from others, who have tested it more recently. In addition to the data given by them, we have received from our representatives, who come into personal contact with so many doctors all over the United States, most convincing proofs of the admirable therapeutic results, arising from its administration, the claim being urged positively, that, grain for grain, it is as efficient as Sulphate of Quinine, with the advantages of not being nearly so apt to induce cerebral excitement, and, of proving more lasting in its antiperiodic influence, a superiority always claimed for the mixed alkaloids and the bark, over the single salt, and we believe, deservedly. So confident are we, of the great value of Quinquinia as manufactured by this firm, that we have secured their entire product, believing that as soon as its merits are generally known, it will be preferred in a large majority of cases to Sulphate of Quinine or Cinchonidia, being, at least, their equal in therapeutic value, with the important advantage, that we shall be able to supply it at a much less cost. Implicit reliance can be placed on its always being furnished of exact strength and uniform quality by the chemists who prepare it, the entire line of chemicals they manufacture being unexcelled—rarely, indeed, equalled—by the products of any laboratory in the world. We shall be glad to send their pamphlets, giving full details of clinical reports., etc., etc., and sufficient of the Compressed Tablets of Quinquinia, to test their merits by actual uses to any physician who may desire them. As we are unable to send the elixir by mail, we will take pleasure in sending by express a sample of either, with printed matter, etc., to physicians, who will pay charges.

JOHN WYETH & BRO.,

Manufacturing Chemists, PHILADELPHIA.

Physicians and Druggists

SEEKING A LOCATION.

Indiana, Illinois, Missouri, Kentucky, Kansas, Iowa, Minnasota or Dakota should send for a copy of the respective State Gazetteer and Directory, describing

Every City, Town, Village & Cross-Roads Settlement.

The sketch of each place, specifying its population, chief business interests, prospects, improvements being made or projected, churches, schools, character of surrounding country with price of improved and unimproved land, if not on a railroad, nearest station, with distance and fare thereto, etc., etc.

No place is omitted, however small or remote, and all items of interest concerning it are given. The description of each place is followed by the names of all its business and professional men.

But in addition to this alphabetical list for each place, there is also prepared a CLASSIFIED LIST for the ENTIRE STATE, wherin the NAMES of ALL PERSONS in EACH PURSUIT may be found: for example, under the head of Physicians or Druggist appears the name and P. O. address of every one in the State arranged alphabetically by towns, so that the precise number of any place may be seen at a glance.

In the list of Physicians, the system or school practiced by each is specified.

These works are replete with information valuable to all classes of business and professional men, being volumes of from

1200 to 1500 Pages,

and compiled and published at an expense of several thousand dollars for each State.

R. L. POLK & CO.,

PUBLISHERS.

22 N Fourth Street, St. Louis, Mo.

Manufacturing Chemists, Instrument Makers, Medical Publishers, or others desiring a complete list of Physicians, Druggists or any other class, will find ours to be the most accurate and conveniently arranged.

BLANCARD'S PILLS

OF UNCHANGEABLE IODIDE OF IRON.

Blancard's Pills of Iodide of Iron are so scrupulously prepared, and so well made, that none other have acquired a so well deserved favor among physicians and pharmaceutists. Each pill, containing one grain of proto-iodide of iron, is covered with finely pulverised iron, and covered with balsam of tolu. Dose, two to six pills a day. The genuine have a *reactive silver seal* attached to the lower part of the cork, and a green label on the wrapper, bearing the fac-simile of the signature of *Blancard*

Pharmacien, No. 40 Rue Bonaparte, Paris

without which none are genuine.

BEWARE OF IMITATIONS.

DOCTOR RABUTEAU'S

Dragees, Elixir and Syrup of Iron.

The numerous experiments made by the most distinguished practitioners of our days in France and America have demonstrated that Dr. Rabuteau's preparations of Iron are superior to all other chalybeates in the treatment of *Chlorosis, Anæmia, Debility, Exhaustion, Convalescence, Weakness of Children*, and all diseases caused by a deterioration of the blood.

Dr. Rabuteau's Dragees (sugar coated pills) do not blacken the teeth, and are assimilated by the most delicate stomachs without causing constipation. Dose, a morning and evening, at meal time.

Dr. Rabuteau's Elixir is especially adapted to weak persons, whose digestive functions need strengthening or stimulating.

Dr. Rabuteau's Syrup is especially prepared for children, who take it readily because of its agreeable taste.

Prepared by CLIN & CO., Pharmacists, Paris.

Kirkwood's Inhaler.

This is the only complete, reliable and effective inhaler in use, arranged for the direct application of Muriate of Ammonia and other remedial agents in the state of vapor to the diseased parts of the air passages in the treatment of catarrh and diseases of the throat and lungs. No heat or warm liquids required in its use.

It is entirely different from the various frail, cheap instruments that have been introduced.

KIRKWOOD'S INHALER is accompanied by testimonials of the highest professional character, together with carefully prepared formulas for use.

Retail Price, complete, $5.00; Small size, $2.50.

A liberal discount allowed to the trade and profession.

For descriptive pamphlets, or other information, address

E. FOUGERA & CO.,

30 North William Street, New York.

SAVORY & MOORE, beg to call the attention of the Profession to some of their Special Preparations, the purity and uniform strength of which are Guaranteed.

PANCREATIC EMULSION.

Prepared in accordance with the direction of the Physician who introduced this remedy

Medicinal Food for Consumption and Wasting Diseases.

Pancreatic Emulsion will always take precedence of Cod Liver Oil by reason of its introducing the STABLE SOLID FATS INTO THE SYSTEM instead of the evanescent fluid fats or oils.

Neither Cod Liver Oil nor EMULSIONS OF COD LIVER OIL can supply the kind of fat necessary for sound and vigorous human life. In addition to this, all the Oily Emulsions are liable to rancidity, and most of them are highly objectionable in consequence of the SAPONIFICATION and ULTIMATE PUTREFACTION, produced by the chemical agents used instead of Pancreatic Juice.

Pancreatic Emulsion (properly so-called), is THE NECESSARY FOOD FOR THE CONSUMPTIVE, and the most reliable form of nutriment for counteracting the tendency to Phthisis and other wasting diseases. It presents to the lacteals fat in essentially the same condition for assimilation and absorption as in a vigorous human frame, and THE AGENT of the important change is THE NATURAL SECRETION of the PANCREAS.

Pancreatic Emulsion, may therefore be regarded as Chyle obtained by nature's own process. In certain cases both Cod Liver Oil and Pancreatic Emulsion are required—one to supply the blood with oil or liquid fat, the other with the more stable solid fats; but it cannot be too strongly urged that both PANCREATIC EMULSION and Cod Liver Oil are *not to be regarded as Medicines, but as articles of diet*, without which patients, with their defect of health, will as surely starve as healthy persons would if deprived of the most nutritive part of their food.

Pancreatine, effects the digestion and assimilation of Cod Liver Oil and Fat, as well as Food generally. This palatable and popular remedy is therefore invaluable to PATIENTS WHO ARE UNABLE TO DIGEST COD LIVER OIL, and who are thus deprived of its nourishing and invigorating properties.

BEST FOOD FOR INFANTS!

TRADE MARK.

AS SUPPLIED TO

THE ROYAL NURSERIES

Of England, Russia, Etc.,

And containing the

Highest Amount of Nourishment

IN THE

Most Digestible and Convenient Form.

The most perfect substitute for healthy mothers' milk.

Datura Tatula for Asthma, Etc.

A Powerful and Universally Adopted Remedy.

"By immediate contact with the air cells and passages, instant relief is given."—Dr. Latham, *Physician to the Queen.*

"A remedy of great power and usefulness in Asthma, Chronic Bronchitis, etc."—Dr. W. Barker.

"The smoke causes no nausea. I have never known an instance in which relief was not obtained."—General Alexander.

In Tins, for use by means of a pipe, Cigars and Cigarettes, and Pastilles for Inhalation.

SAVORY & MOORE, 143 New Bond Street, London.

Agents for America—E. FOUGERA & CO., New York.

ANIMAL

Vaccine Virus,

PROPAGATED AT THE

Missouri Vaccine Farm. By R. M. Higgins, M. D.

This Institution, the largest and most reliable (for satisfactory results) in the West, was established eight years ago by Dr. Higgins who personally superintends the process of procuring Virus from each heifer.

The hundreds of *encouraging testimonials* of Physicians from all sections of the country warrant the enterprise in being continued.

EXTRA NOTICE.

For the past *eight years* the Virus has been exclusively used by the St. Louis Board of Health, in the Public Schools and throughout the city, and such has been the satisfactory results that even last winter—1881-82—when small-pox was an epidemic in most of the large cities in our country, St. Louis was *comparatively free* from it.

This *fact alone* speaks *volumes* in favor of the virtue of the Virus.

Quills.—Vaccine lymph *dried on quills* has proven the *most reliable* and therefore especially recommended.

PRICE LIST:

2 Vaccinations (1 whole quill), - - - - - - - - .25
10 Vaccinnations, (5 whole quills) - - - - - - - $1.00

A fresh supply of this Vaccine will be received every few days, and only *fresh Virus* will be sent out.

All failures duplicated when used strictly in accordance with printed directions, which accompany each package.

All orders by mail or telegraph will receive prompt attention. Address

ST. LOUIS MEDICAL AND SURGICAL JOURNAL.

General Agents 1225 Washington Ave., St. Louis.

TO THE MEDICAL PROFESSION.

CELERINA THE NERVE-TONIC

FORMULA.—CELERINA is the *isolated*, active *nerve-toning* principle of Celery, Coca and Viburnum, *combined* in a pleasant *fluid* form.

DOSE.—One or two teaspoonfuls *three* or *more* times a day, as indicated.

Each fluid drachm represents three and one-half grains each—Celery, Coca, and Viburnum, combined with Aromatics.

CELERINA is *the* Nerve Tonic *sans pariel.* It *refreshes the tired brain*, and imparts tone and vigor to the entire nervous system; therefore, it is of the *utmost value* in Nervous Exhaustion, Sexual Debility, Paralysis, Dysmenorrhœa, Spermatorrhœa, Hysteria, Chorea, Weakness of old age, and *all* LANGUID conditions of the system.

☞TO PHYSICIANS.—I will take pleasure in forwarding free a sample bottle sufficient to test fully its merits. A trial only is sufficient to establish its medicinal value.

J. H. McINTYRE, M.D.,
Surgeon in charge of the St. Louis Free Dispensary, St. Louis, Mo.

As a Nerve-Tonic CELERINA has few equals and no superior.

L. CH. BOISLINIERE, M.D., LL.D.,
Professor Obstetrics and Diseases of Women, St. Louis Medical College.

After giving CELERINA *a fair trial* I have found that, as a Nerve-Tonic and Vital Reconstructor, it is *what it claims to be.*

GEO. C. PITZER, M.D.,
Professor Practice of Medicine, American Medical College, St. Louis.

I have prescribed CELERINA in cases of *weak, tired and nervous men and women, with satisfaction. It is a powerful and refreshing tonic, lasting in its effects.*

E. FLETCHER INGALS, M.D.,
Professor Physiology, Hygiene and Clinical Medicine, Medical College of Indiana, Indianapolis, Ind.

I have been using CELERINA in nervous diseases, particularly functional diseases of the heart, for some time, and I am satisfied that as now prepared it is a useful remedy.

C. H. HUGHES, M.D.,
Lecturer on Psychiatry and Neurology, Post-Graduate Faculty, St. Louis Medical College, Editor of Alienist and Neurologist, etc.

I frequently prescribe CELERINA when I want to use a reliable compound of celery and coca, and the prescription has given me satisfaction in its results as a Nerve-Tonic in many cases.

H. A. COTTELL, M.D.,
Demonstrator of Anatomy, Microscopy and Medical Chemistry, University of Louisville, Medical Department.

CELERINA is a combination of drugs which meets all the requirements of a first-class prescription: It is efficient, agreeable and safe. I have used it in two cases of neurasthenia with highly satisfactory results, and shall give it still further trial.

JAY OWENS, M.D.,
St. Paul, Minn.

I am having good results from CELERINA in weakness of the generative organs in males, and also find it *an excellent general Nerve-Tonic.*

R. DARRINGTON, M.D.,
Kingston, Miss.

I have obtained *the most satisfactory results* from the use of CELERINA in my practice. *I have never prescribed a preparation to which I am more indebted.*

P. H. CRONIN, M.D.,
Surgeon, Department Throat and Lungs, St. Louis Free Dispensary.

Having thoroughly tested the merits of CELERINA both in chemical and private practice, I take pleasure in stating that it is *superior* to any remedy of its class.

D. F. POWELL, M.D.,
La Crosse, Wis.

I believe that CELERINA is the *best Nerve-Tonic in use.* In one case (in which no other remedy was of benefit) a cure was effected. My patient was grateful—so am I.

N. F. DONALDSON, M.D.,
North Platte, Neb.

I have extensively prescribed CELERINA for spermatorrhœa, impotency, and other diseases of the male sexual organs, and it has never failed in doing more than all other remedies. I cheerfully recommend it to the profession.

D. R. BROWER, M.D.,
Editor Chicago Medical Examiner, and Professor Nervous and Mental Diseases, etc., Woman's Medical College.

I have used CELERINA in several cases of nervous exhaustion with good results. It contains celery, coca and viburnum, excellent drugs that are often indicated in such cases.

C. C. FORBES, M.D.,
Visiting Physician to Female, Medical and Obstetrical, Department of Louisville City Hospital: late Medical Superintendent of Central Kentucky Lunatic Asylum, Anchorage, Ky.

* * * * * The formula of Richardson's CELERINA challenges the confidence fully of any one acquainted with its constituents. I have had occasion to prescribe it in numerous cases, and have found it to justify my expectations to a highly satisfactory degree. In nervous debility, or nervous exhaustion, especially from protracted overwork—in short, for almost any form of neurasthenia, it seems to me an invaluable remedy.

PREPARED ONLY BY

J. C. RICHARDSON, Chemist, ST. LOUIS, MO.

Celerina is prepared for use of Physicians only, and can be had from all reputable Druggists, wholesale and retail, in the United States, or from

RICHARDSON & CO., Wholesale Druggists, 710 N. Main St., ST. LOUIS, MO.

ASSAYED DRUGS & PREPARATIONS.

There are many crude drugs and preparations which may vary considerably in the amounts of active, and consequently valuable constituents, and yet present no reliable physical indications of these variations. Thus it is impossible, except for an expert, to say whether certain *calisaya barks* are true or spurious, or whether they contain the proper amounts of quinine. In like manner the amount of morphine in moist or dry *opium*, the quantity of valuable resin in *virgin scammony* and *imported resin of scammony*, the amounts of quinine, or strychnine, or both, in the various *scaled salts of iron*, the real amount of pure nitrous ether in *spirits of nitrous ether*, are all questions which can only be answered after a careful chemical analysis has been made. In like manner *sulphate of quinine* and *sulphate of morphine* should never be sold unless they have been carefully examined in order to detect fraudulent additions or the presence of unallowable amounts of impurities.

It is our uniform custom to subject all of the above articles, which are sold under our own name and with our guarantee, to a thorough chemical examination. We find that a rigid adherence to this rule has resulted in good, not only to ourselves but to our customers. We are able to understandingly recommend and guarantee these important medicinal agents, and our customers, the druggists, can in turn unhesitatingly recommends goods bearing our brand to physicians.

It must not be inferred that the above goods are the only ones which we assay. All the most important products of our laboratories which are susceptible of accurate assay are carefully tested, and every precaution is taken to prevent errors and to insure the highest quality.

It requires no labored argument to convince the physician that these safeguards are important, and serve to protect him as well as his patients. Other things being equal the physician who uses the best medicines will have the best success. We notice with pleasure that there is a decided movement among leading physicians and pharmacists in favor of greater purity, definiteness, and simplicity in the articles used in medicine. It is our intention to furnish just such goods, and we respectfully ask a carefull examination of all articles of our production.

In future communications we shall speak more at length of the individual preparations which we offer.

W. H. SCHIEFFELIN & Co. New York.

Wanted.—By a physician, thirty years of age, with six years' experience in an extensive practice; wishes to associate himself with some good physician in the city of St. Louis or some large place doing a large business. No better reference can be given as to character and ability; healthy, willing and able to work.

Address C. B. Richardson, care of F. M. Rumbold,
2622 Washington Ave, St. Louis, Mo.

CONTENTS.

ORIGINAL CONTRIBUTIONS.

ARTICLE. PAGE.

I. Jequirityc Ophthalmia. By S. POLLAK, M. D., of St. Louis..... 9

II. Medical Empiricisms, Homœopathy and Codes. By ROMAINE J. CURTISS, M. D., Joliet, Ill..... 18

III. A Few Thoughts on Diphtheria. By F. W. ENTRIKEN, M. D., Findlay, O..... 27

IV. Iron in Medicine. By E. BENKENDORF, M. D., of St. Louis..... 30

TRANSLATIONS.

V. FROM THE FRENCH.—EXCERPTS FROM LATE FRENCH JOURNALS. [Translated for the JOURNAL.] By S. POLLAK, M. D., of St. Louis.—Anthropological.—The Poisoned Arrows of the North American Indians.—*Therapeutical.*—Salicylate of Soda.—Bromides in Nausea and Vomiting.—Castor oil and Glycerine as a Purgative.—Pyrogallic Acid used by Friction in Psorasis.—Pyrogallic Acid in simple Phagedenic Chancre. *Psychiatrical.*—Functional Independence of each Cerebral Hemisphere..... 31

VI. FROM THE GERMAN.—EXCERPTS FROM LATE GERMAN JOURNALS. [Translated for the JOURNAL.] By S. POLLAK, M. D., of St. Louis.—*Therapeutical.*—Quinine in Large Doses in Diseases of the Ear.—Hypermanganese of Potash in the treatment of Amenorrhœa.—Bronchial Asthma.—A Life Saving Infusion of Solution of Muriate of Soda, in acute Anæmia. The Influence of Erysipelas upon Syphilis.—An Autographic woman.—Electrical Massage and Electrical Gymnastic.—A Peculiar form of General Atrophy after Diphtheria..... 39

VII. The Morphine Habit (Morphismus). From the *Wiener Medizinische Wochenschrift.* By J. EPSTEIN, M. D., of St. Louis. 42

CLINICAL LECTURE.

VIII. Extracts of Clinical Lectures Delivered by EDW. BOCK, A. M., M. D., Prof. of Surgical Diseases of Children, and Clinical Surgery, College for Medical Practitioners of St. Louis, Mo. [Reported for the JOURNAL by H. MARKS, M. D., of St. Louis, Mo.]..... 44

PROCEEDINGS OF MEDICAL SOCIETIES.

IX. ST. LOUIS MEDICAL SOCIETY.—Orbital Cyst.—Syphilitic Ulcer of Pharynx.—Diphtheria.—Tracheotomy Tube.—The

LELIEVRE'S POULTICE

OF ICELAND MOSS,

AN INSTANTANEOUS & PERFECT SUBSTITUTE FOR LINSEED MEAL AND OTHER POULTICES.

It is preferable to the latter, because it is

Clean, for it will not soil the linen.

Unobjectionable, for it will not emit any unpleasant odor.

Unchangeable, for it will not ferment.

Economical, for the same Poultice can be applied for many days without undergoing any change.

Lelievre's Poultices are sold in packets containing three and six sheets 5 by 8 inches, and in rolls 8 by 30 inches

DIRECTIONS FOR USE.—Dip the Poultice into boiling water until quite swollen, then apply to to the part and cover with the gutta percha sheeting accompanying the poultice, or with oiled silk. Samples sent on application by the

General Depositaries for the United States ;

E. FOUGERA & CO., New York.

SOLD BY ALL DRUGGISTS.

THEVENOT'S GLOBULES.

We offer to the Medical Profession a series of well prepared and reliable pharmaceutical products, in which the unpleasant taste and disagreeable odor of the various remedial substances contained in them are entirely covered, and other drawbacks to their administration obviated. The form of Globules is especially applicable to liquids, but may also be applied to pulverulent remedies, simple or compound. It is especially adapted to Ethers and Ethereal fluids ; Oils, fixed or volatile ; Oleo-resins ; Balsams, etc., and is by far the most convenient as well as most elegant form for administering them.

Among the great variety comprising about 60 different kinds, we mention the following, which are among the most important :

Ether, Chloroform, Oil of Turpentine, Apiol, Phosphorated Oil (containing 1-64th grain of Phosphorus), **Tar, Venice Turpentine, Copaiba, Copaiba and Tar, Oleo-Resin of Cubebs, Balsam of Peru, Oleo-Resin of Male Fern, Oil of Sandal, Oil of Eucalyptus, Cod-Liver Oil, Rhubarb, Bicarb. of Soda.**

For a full list of the various kinds of Globules, with the quantity of the medicinal agents contained in each Globule, see pamphlet, which will be furnished or mailed on application, by the agents,

E. FOUGERA & COMPANY,

30 North William Street, New York.

FOR CONSUMPTION AND WASTING DISEASES.

HYDROLEINE

Has been proved of the highest value in CONSUMPTION and all WASTING DISEASES, invariably producing IMMEDIATE INCREASE IN FLESH AND WEIGHT.

FORMULA OF HYDROLEINE.

Each dose of two teaspoonfuls, equal to 120 drops, contains:

Pure Cod Liver Oil 80 m. (drops.)	**Soda ..... 1-3 grains.**
Distilled Water ..... 35 "	**Boric Acid ..... 1-4 "**
Soluble Pancreatin .5 grains.	**Hyocholic Acid .....1-20 "**

DOSE.—Two teaspoonfuls alone, or mixed with twice the quantity of soft water, to be taken thrice daily with meals.

The principles upon which this discovery are based have been described in a Treatise on "THE DIGESTION AND ASSIMILATION OF FATS IN THE HUMAN BODY," by H. C. BARTLETT, Ph. D., F. C. S., and the experiments which were made, together with cases illustrating the effect of Hydrated Oil in practice, are concisely stated in a Treatise on "CONSUMPTION AND WASTING DISEASES," by G. OVEREND DREWRY, M. D.

In these Treatises the Chemistry and Physiology of the Digestion of the Fats and Oils is made clear, not only by the description of a large number of experiments scientifically conducted, but by cases in which the deductions are most fully borne out by the results.

☞COPIES OF THESE VAIUABIE WORKS WILL BE SENT FREE ON APPLICATION.

HYDRATED OIL, **HYDROLEINE,** WATER AND OIL.

HYDROLEINE is readily tolerated by the most delicate stomachs, even when the pure oil or the most carefully prepared Emulsions are rejected. The oil is so treated with pancreatin, soda, boric and hyocholic acids, that the process of digestion is partially effected before the organs of the patient are called upon to act upon it. Consequently it is readily assimilated. In will nourish and produce increase in weight in those cases where oils or fats, not so treated, are difficult or impossible to digest. In CONSUMPTION and other WASTING DISEASES, the most prominent symptom is *emaciation*, of which the first is the starvation of the fatty tissues of the body, including the brain and nerves. This tendency to emaciation and loss of weight is arrested by the regular use of HYDROLEINE, which may be discontinued when the usual average weight has been permanently regained.

The permanence and perfection of the emulsion, and the extreme solubility of the HYDRATED OIL, solely prepared and sold by us under the name of HYDROLEINE, is shown by its retaining its cream-like condition as long as the purest Cod-Liver Oil, will retain its sweetness. Unlike the preparations mentioned, or simple Cod-Liver Oil, it produces no unpleasant eruction or sense of nausea, and should be taken in such very much smaller doses according to the directions, as will insure its complete assimilation; this, at the same time, renders its use economical in the highest degree.

To brain-workers of all classes, Hydrated Oil is invaluable, supplying as it does, the true brain food.

Economical in use—certain in result. Tonic—Digestive and Highly Nutritive.

NEW PRINCIPLE FOR THE ASSIMILATION. FAT.

KIDDER & LAIRD, Agents for the United States,

Price at retail, $1.00 per Bottle. Depot, 83 John Street, New York.

MALTINE.

MALTINE is a concentrated extract of malted Barley, Wheat and Oats. In its preparation the temperature does not exceed 150 deg. Fahr., thereby retaining all the nutritive and digestive agents unimpaired. Extracts of Malt are made from Barley alone, by the German process, which directs that the mash be heated to 212 deg. Fahr., thereby coagulating the Albuminoids and almost wholly destroying the starch digestive principle, Diastase.

LIST OF MALTINE PREPARATIONS.

MALTINE (Plain).
MALTINE with Hops.
MALTINE with Alteratives.
MALTINE with Beef and Iron.
MALTINE with Cod Liver Oil.
MALTINE with Cod Liver Oil and Pancreatine.
MALTINE with Hypophosphites.
MALTINE with Phosphorus Comp.
MALTINE with Peptones.
MALTINE with Pepsin and Pancreatine.
MALTINE with Phosphates.
MALTINE with Phosphates Iron and Quinia.
MALTINE with Phosphates Iron, Quinia & Strych.
MALTINE Ferrated.
MALTINE WINE.
MALTINE WINE with Pepsin and Pancreatine.
MALTO-YERBINE.
MALTO-VIBURNIN.

MEDICAL ENDORSEMENTS.

We append, *by permission*, a few names of the many prominent Members of the Medical Profession who are prescribing our Maltine Preparations:

J. K. BAUDUY, M. D., St. Louis, Mo., Physician to St. Vincent's Insane Asylum, and Prof. Nervous Diseases and Clinical Medicine, Missouri Medical College.

WM. PORTER, A. M., M. D., St. Louis, Mo.

E. S. DUNSTER, M. D., Ann Harbor, Mich., Prof. Obs. and Dis. Women and Children University and in Dartmouth College.

THOMAS H. ANDREWS, M. D., Philadelphia, Pa., Demonstrator of Anatomy, Jefferson Medical College.

B. F. HAMMEL, M. D., Philadelphia, Pa., Supt. Hospital of the University of Penn.

F. R. PALMER, M. D., Louisville, Ky., Prof. of Physiology and Personal Diagnosis, University of Louisville.

HUNTER McGUIRE, M. D., Richmond, Va., Prof. of Surgery, Med. Col. of Virginia.

F. A. HARDEN, M. D., Milwaukee, Wis., Supt. and Physician, Milwaukee County Hospital.

L. P. YANDELL, M. D., Louisville, Ky., Prof. of Clinical Medicine and Diseases of Children, University, Louisville.

JOHN. A. LARRABEE, M. D., Louisville, Ky., Prof. of Materia Medica and Therapeutics, and Clinical Lecturer on Diseases of Children in the Hospital College of Medicine.

R. OGDEN DOREMUS, M. D., L.L.D., New York, Prof. of Chemistry and Toxicology, Bellevue Hospital Medical College; Prof. of Chemistry and Physics, College of the City of New York.

WALTER S. HAINES, M. D., Chicago, Ill., Professor of Chemistry and Toxicology, Rush Medical College, Chicago.

E. F. INGALLS, A. M., M. D., Chicago, Ill., Clinical Professor of Diseases of Chest and Throat, Woman's Medical College.

A. A. MEUNIER, M. D., Montreal, Canada, Prof. Victoria University.

H. F. BIGGAR, M. D., Prof. of Surgical and Medical Diseases of Women, Homœopathic Hospital College, Cleveland, Ohio.

DR. DOBELL, London, England, Consulting Physician to Royal Hospital for Diseases of the Chest.

DR. T. F. GRIMSDALE, Liverpool, England, Consulting Physician, Ladies' Charity and Lying-in-Hospital.

WM. ROBERTS, M.D., F.R.C.P., F.R.S., Manchester, England, Prof. of Clinical Medicine, Owens' College School of Medicine; Physician Manchester Royal Infirmary and Lunatic Hospital.

J. C. THOROWGOOD, M.D., F.R.C.P., London, England, Physician City of London Hospital for Chest Diseases; Physician West London Hospital.

W. C. PLAYFAIR, M.D., F.R.C.P., London, England, Prof. of Obstetric Medicine in King's College, and Physician for the Diseases of Women and Children to King's College Hospital.

W. H. WALSHE, M.D., F.R.C.P., Brompton, England, Consulting Physician Consumption Hospital, Brompton, and to the University College Hospital.

A. WYNN WILLIAMS, M. D., M.R.C.S., London, England, Physician Samaritan Free Hospital for Diseases of Women and Children.

A. C. MACRAE, M.D., Calcutta, Ind., Dep. Insp.-Gen. Hosp. Ind. Service, late Pres. Surg., Calcutta.

EDWARD SHOPPEE, M.D., L.R.C.P., M.R.C.S., London, England.

LENNOX BROWN, F.R.C.S., London, Eng., Senior Surgeon, Central Throat and Ear Hospital.

J. CARRICK MURRAY, M.D., Newcastle-on-Tyne, England, Physician to the N. C. H. for Diseases of Chest.

J. A. GRANT, M.D., F.R.C.S., Ottawa, Canada.

MALTINE is prescribed by the most eminent members of the Medical Profession in the United States, Great Britain, India, China and the English Colonies, and is largely used at the principal Hospitals in preference to any of the Extracts of Malt.

☞ We will forward gratuitously a 1-lb. bottle of any of the above preparations to Physicians, who will pay the express charges. Send for our 28 page Pamphlet on Maltine for further particulars.

THE MALTINE MANUFACTURING COMPANY,
JOHN CARNRICK, President.
(Of Reed & Carnrick, Manufacturing Caemists and Pharmacists.)

BEEF PEPTONOIDS,

A CONCENTRATED POWDERED EXTRACT OF BEEF, PARTIALLY DIGESTED AND COMBINED WITH AN EQUAL PORTION OF GLUTEN.

We have pleasure in presenting, for the consideration of the Medical profession, "Beef Peptonoids." We consider this product the most valuable that ever emanated from our Laboratory, and we feel confident it will be welcomed by the Profession in all parts of the world.

Beef Peptonoids contains *only* the *nutritious portions* of the beef. It contains *no water* and *no inert matter* of any kind. We combine the dry Extract of Beef with an equal *portion* of Gluten to prevent a tendency to deliquescense, and in order to present the preparation in a powdered and portable form. It is well known that Gluten is the most nutritious substance found in the Vegetable Kingdom, and in nutritive elements is closely allied to Beef.

Four ounces of Beef Peptonoids represents as much nutritive and stimulating properties as forty-eight ounces of the best lean Beef.

Four ounces of Beef Peptonoids contains more nutritive elements than ten pounds of any Extract made by Liebig's formula, and from four to six times more Albuminoids and Fibrinoids than any Beef Extract ever offered to the Medical Profession.

Our machinery and process for the production of Beef Peptonoids are perfectly adapted to the *elimination* of all inert portions of the Beef and the *retention* of all the nutritive constituents.
Beef Peptonoids *is much less expensive than any other preparation in the market, as it contains neither water or inert matter.*

The favor our preparation of Beef Peptonoids received at the hands of Drs. Agnew, Hamilton, Bliss, Reyburn, Woodward, Barnes, &c., the corps of eminent Physicians, who employed the preparation with so much advantage in the treatment of the late President Garfield, proves conclusively its great value, not only as a food to be taken by the mouth, but also, how important an agent it has been found in feeding by the Rectum.

Please refer to the very able article of Dr. D. W. Bliss, in the New York *Medical Record*, July 15th, 1882, in which he so frequently refers to Beef Peptonoids, having been used to so great an advantage, not only in the case of the late President Garfield, but many others as well.

We employ a reliable and experienced person to select the Beeves before they are slaughtered and to superintend the killing and dressing. Great care is excercised in this respect, and none except the most healthy and suitable beeves are employed in making our Beef Peptonoids.
Every physician will appreciate the importance of this care, for an Extract made from diseased Beef would not only be deleterious, but would, in many cases, produce lasting injury and fatal results.

The use of Beef Peptonoids is indicated as follows:
Convalescence from all diseases, Fevers, Pneumonia, Weak Digestion, Diarrhœa, Dysentery, Phthisis, Cholera Infantum, Marasmus, Sea Sickness, Excessive use of Alcoholic Stimulants, Per Rectum in all cases where the stomach cannot digest the food, and in debility resulting from any cause. Also, a valuable adjunct in voyages and camp life.
We will be pleased to have the Profession everywhere test our assertions regarding this preparation, and for that purpose we will be happy to mail a sample to any regular practitioner desiring it; also circulars fully explanatory.

Thanking the Profession for generous support in the past, we beg to remain,
Very Respectfully,

Reed & Carnrick,

182 FULTON ST., NEW YORK.

ALOE & HERNSTEIN,

Importers and Manufacters of

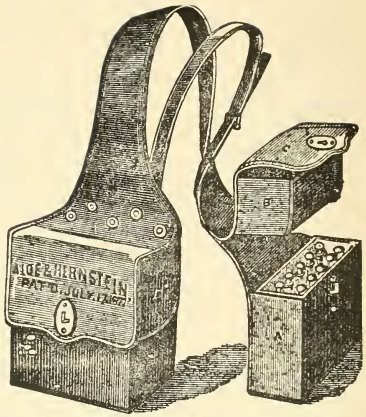
Surgical and Electrical

INSTRUMENTS,

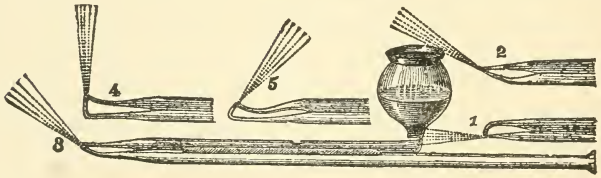
Orthopædical Instruments

OF EVERY STYLE.

300 North Fourth St.



Aloe & Hernstein's Pat. Saddle Bag, $10.



Rumbold's Spray Producers

Aloe & Hernstein's Improved Office Battery, $15.

ALOE & HERNSTEIN,

Sole Manufacturers of the

IMPROVED STOHRER

Electro Galvanic Battery,

Aloe & Hernstein's Improved Office Battery.

Aloe & Hernstein's Patent Saddle Bag.

Imp'd. Electric Bath Instrument.

Agents for Geo. Tieman & Co.'s Celebrated Instruments.

Send for Illustrated Catalogues.

P. S.—Any style of Electric Machine made to order.

N. E. Cor. Olive

ST. LOUIS, MO.

E. T. PELGREE.

MANUFACTURER OF

Surgical and Dental Instruments,

TRUSSES, BRACES

AND

APPARATUSES FOR DEFORMITIES.

REPAIRING, A SPECIALTY.

ALL ORDERS PROMPTLY EXECUTED.

Mr. E. T. Pelgree, Sir.—

As you have guaranteed that all of my Instruments that you manufacture will be as perfect as those you have made for me, I will recommend my friends to patronize you.

THOS. F. RUMBOLD, M. D.

St. Louis, May, 1882.

NO. 317 NORTH THIRD STREET.

Bet. Olive and Locust, ST. LOUIS, MO.

IN MORNING SICKNESS

AND OTHER DISEASES

INCIDENT TO PREGNANCY.

The action of the Acid Phosphate upon the system during pregnancy is very effective; the morning sickness being treated with good results; and where indigestion is a sympathetic trouble it has been found a valuable and pleasant remedy.

In cases of exhaustion and nervous prostration from lactation, it has been used with excellent results.

During pregnancy the consumption of phosphate of lime is very great; so that at this period of woman's life, fractures heal, if at all, with great difficulty. The Acid Phosphate supplies the phosphates needed at such times.

Dr. D. T. Nelson, of Chicago, says: "I find Horsford's Acid Phosphate a pleasant and valuable remedy in indigestion, particularly in pregnant women."

Dr. W. L. Atlee, of Philadelphia, says: "Having used Horsford's Acid Phosphate very extensively in my practice, which consists mostly of uterine diseases and disorders incident thereto, it is with pleasure I attest my appreciation of its usefulness."

Let the patient put eight or ten drops of Acid Phosphate into half a glass of cold water, and take a sip of it, say a few minutes before rising or whenever the sickness or nausea is coming on.

It is equally effective in hot water, or tea without milk or sugar, and to some may thus be more palatable. In such cases use the same dilution as above. Some constitutions may need a stronger dilution, which fact, experience alone can decide.

Prices reasonable. Pamphlet giving further paticulars mailed free on application to manufacturers.

Physicians desiring to test it will be furnished a bottle free of expense, except express charges.

MANUFACTURED BY THE

RUMFORD CHEMICAL WORKS, Providence, R. I.

THE

SAINT LOUIS

MEDICAL AND SURGICAL

Journal.

VOLUME XLV——July, 1883——No. 1.

Original Contributions.

ARTICLE I.

JEQUIRITYC OPHTHALMIA.* By S. POLLAK, M. D., of St. Louis, Surgeon in Charge of the Eye and Ear Infirmery of the St. Louis Hospital; Founder, Trustee and Physician of the Missouri School for the Blind.

Jequirityc ophthalmia is an artificial disease, induced by the use of jequirity for the treatment of one of the most frequent, and the most intractable diseases of the human eye, namely, granular ophthalmia and vascular cornea.

Great diversity of opinion exists both as to the pathology and treatment of trachoma or granular conjunctivitis, and the pannus or vascular cornea resulting therefrom.

While the belief that trachoma is of a contagious origin, seems to be predominent, yet there are many who think it is of an iodipothic character. There is, however, great unanimity in regard to the prognosis.

The popular dread of the "Egyptian ophthalmia" is only too

*Read before the Missouri State Medical Society, May 16, 1883, and the St. Louis Medical Society, May 26, 1883.

well founded. Though ophthalmiatry has made great progress in the last three decades, and the therapy of eye diseases is founded upon a more rational scientific basis, yet it is the fate of many trachomatous patients to have a long thorny road to travel, beset with grievous disappointments. Hope is often deferred and fond expectations are not realized.

There are cases of an intractable and virulent character, which baffle the most rational and persistent treatment. Improvements and relapse constantly alternate. When every appearance indicates that the desired end has been attained, a sudden change for the worse takes place, exceeding in severity all previous attacks. Permanent and irreparable injury to vision is frequently the result, and the patient's means and patience are irretrievably wrecked. It is no wonder that investigators are indefatigable, to fathom the cause and nature of that dreadful scourge, and to devise means to combat it.

Of late the theory has obtained currency, that trachoma owes its existence to specific bacteria, and antiseptic treatment was given a fair trial. *Bichloride of mercury* was applied, as the best fungoicidal remedy; so also the *iodoform* as an approved antiseptic, but none proved equal to the *nitrate of silver*, which besides its astringent and antiseptic property has an especial chemical affinity for the albumenoids, with which it intimately combines, and thus prevents a division and proliferation of cells. To this is due the great reputation of nitrate of silver in diseases of the conjunctiva.

The *sulphate of copper* has been very much used in a routine way in trachoma on account of its strong astringent properties, but it lacks the chemical affinity of the nitrate of silver, it causes very great pain and after a protracted and persistent use, it leaves the trachomatous conjunctiva absolutely unimproved.

A greater resemblance to the nitrate of silver has the *acetate of lead*, which undoubtedly influences the vitality of the cell. It is a powerful astringent, and with the acetas plumbi alcoholisatus, the whole palpebral surface of the conjunctiva would be coated with carbonate of lead. But it is not admissable, when there is the least abrasion of the cornea, as it would leave saturnine deposits and cause saturnine stains.

Sulphate of zinc is a milder astringent, and not very efficient, and the same may be said of *sulphate of alum*, of *boracic acid* and of *tannic acid*.

Cromic acid is very quick in destroying granulations, but they will sprout again in a short time. Dusting with *dry calomel*, so much used in Prof. Arlt's clinic in Vienna, has not proven a success elsewhere.

Surgical means have long been applied in trachoma and pannus, such as:

1. *Scarification* or complete laceration of the trachomatous surface.

2. *Ablation* of the follicular and fleshy excrescences.

3. *Peritomy* (chiefly in pannus) a narrow zone of the conjunctiva one-eigth of an inch in width is removed from around the entire circumference of the cornea, close to its edge and at the same time all the subconjunctival tissue corresponding to the piece of the conjunctiva removed, is dissected off.

4. *Syndectomy* (for pannus) which consists in the removal of a broad zone of the conjunctiva and subjunctival tissue from around the cornea or almost the entire ocular conjunctiva, from the margin of the cornea, to where it is reflected from the globe to the inner surface of the eyelids. The subconjunctival tissue must be carefully dissected off, so as to expose the surface of the sclera. The exposed sclera is touched with a solution of nitrate of silver. This heroic treatment was first practiced by Dr. Furnari, of Paris, in 1842, and made known to the medical world in an account given in the *Gazette Medicale* in 1862. He has not found many imitators. Though cicatrices did not follow this proceeding, yet sclerosis of the conjunctiva frequently resulted.

5. Bardenheuer boldly *scrapes with a sharp spoon*, the entire trachomatous conjunctiva, with perfect disregard of the probable subsequent cicitrization.

6. *Galvano-caustic appliances* have of late been resorted to for trachoma, which are less painful, more rapid and permanent in their effect; less susceptible to infection by sponges and dressings and with very little reaction. Shrinkage and incurving of the tarsus is less likely to occur. Galvano-caustic can be applied either by means of a platinum wire heated to a white heat or with a well fitting shield, which covers the entire palpebral conjunctiva. The shield must be well adapted first, the circuit is then closed, cauterization is quickly effected. Reaction is feeble, and recovery speedy. Yet after a few months cicatrices result and entropium is not prevented.

But there are conditions of vascularity and infiltrations of the

cornea, the result of trachoma, which resist every mode of treatment, remedial as well as operative.

As a *dernier ressort* in these desperate cases of trachomatous pannus, *inocnlation* of *the eye with blennorrhoic* or *gonorrhoic pus* has been proposod by Dr. C. Bader of Guy Hospital and of the Royal Ophthalmic Hospital, Moorfield, London, in 1858, and, has since then been successfully practiced by a great many oculists, including myself. The purulent inflammation of the conjunctiva following this mode of inoculation, invariably destroys the granulations of the lids and clears the opaque cornea. But it is objected to by many surgeons, for reasons happily expressed by Dr. Gruening of New York:

1. The introduction of pus, especially ghonorrhœic pus into the eye of man, is in itself a revolting proceedure.

2. The ensuing ophthalmia often gives rise to diphtheritic infiltration which may destroy the eye.

3. The patient may become infected with syphilitic virus from urethral chancre.

4. He may became affected with ghonorrhœal arthritis.

This array of facts and possibilities is sufficiently potent to deter from its adoption both the physician and the patient. Yet there are occasions when this treatment is the last alternative. I was under the absolute necessity to resort to it only twice.

CASE I.—In 1865 a distinguished officer of the confederate army contracted granular ophthalmia, from constant exposure at the siege of Vicksburg. He remained in service until the close of the war, although he was unable to see but a few feet before him, or to read the largest print. The cornea was covered with a network of bloodvessels, hiding the pupil from view entirely, the result of an exaggerated trachoma of the conjunctiva of the upper and lower lids. The granulations were vigorous, true, fleshy excrescences, bleeding at the lightest touch, causing partial eversion, of the tarsal margin, and giving him a hideous appearance. He had been treated by many of the able army surgeons and several specialists, with the usual routine of remedies, with only aggravating results and threatening a total extinction of sight. He came to St. Louis to consult my friend and associate, the late Dr. Pope, who referred him to me.

Such a desperate case could only be combatted with desperate means. *Purulent inoculation was suggested.* This very

intelligent patient readily understood the risk and the repulsiveness of such a treatment.

But such was his condition, that after deliberating with his family and friends, he acceded to it, pledging his honor that he would consider me blameless in case of failure. Fresh, very virulent pus was obtained from a child a few weeks old, suffering from purulent ophthalmia. One drop was placed under each upper lid, the eyes closed with a light bandage. A violent inflammation set in within twenty-four hours, accompanied with extreme chemosis, great œdema of the lids, purulent secretion very profuse. Constitutional disturbance not very great, and with the exception of the great tention of the lids, he did not suffer much pain. Opiates were not required, nor were any applications made to the eyes. Frequent cleansing of the pus with tepid water was the only treatment enjoined.

In eight or ten days the virulence of the symptoms commenced to abate spontaneously, secretion of the pus lessened, and the swelling of the lids subsided. When on about the twentieth day, the lids could be separated, and the eye a little exposed, he exclaimed that he could see some.

By the end of one month from the time of the inoculation, the cornea was visible, the lids pliable, and vision was improved. In another month the cornea was perfectly clear, transparent, lids normal, every trace of granulation gone, the conjunctiva smooth. He left the city with a grateful heart, wearing only tinted glasses. One year later he reported being engaged as Civil Engineer on the Union Pacific R. R., then in the course of construction, and in enjoyment of perfect health and perfect sight.

CASE II.—I had another case in 1876. An unmarried woman aged 26, a seamstress, had been confined to her room and to her chair on account of total blindness, due to a dense pannus of both eyes, caused by large granulations of the conjunctiva. She had been in that condition two years; had been treated by very able oculists but with no good result. When brought to my clinic, I at once recognized her deplorable condition. I invited the Hospital staff to meet me in consultation, and there I proposed as the only remedy yet untried, purulent inoculation.

The discussion was earnest and long but at last my proposition was unanimously agreed to.

The late Dr. Gebser was also consulted and he at once acceded

to it, and kindly offered to assist me and to stand by me through the entire treatment.

It was no easy matter to explain to an ignorant person the nature of the treatment, and without her entire and free consent, it could not and would not have been undertaken. But her free assent was gladly and promptly given. "I have nothing to lose and much to gain," was her sensible reply.

It was impossible to get purulent pus from an eye in this city at that time. I concluded to take non-syphilitic ghonorrhœic pus, if I could obtain it, in which I succeeded after a diligent search of nearly a week, and from a source least expected. Two threads of Taylor's lint were saturated with the pus and placed in the sulcus of the lower lids and the eyes bandaged lightly. A gonorrhœal ophthalmia of a mild type soon developed. Attaining its acme in eight or ten days, then it gradually subsided without any other treatment, except cleanliness. To our unspeakable delight, and still more so to that of the patient, the cornea had cleared up, the trachoma had entirely disappeared and sight returned in one eye by the end of two months. The cornea of the other eye was also clear, but staphylamatous. She is still living in this city, earning an honest living by sewing and embroidery.

Although these two cases recovered by purulent and ghonorrhœic inoculation, yet I should not like to assume the treatment of a case of trachomatous pannus by such means again. It is repulsive to our nature to have to resort to such a disgusting agency, the risk and responsibility is too great; besides the danger that the very same hopeless patient may go back on us, and ascribe to the treatment and not to the disease, a possibly fatal result.

It is therefore with delight that we learn that a remedy has been found in *jequirity*, which will cause a purulent ophthalmia, produce the same results as those described above, without any of the disadvantages and dangers.

It is to the indefatigable worker, the illustrious Dr. DeWecker, of Paris, France, that we are indebted for the introduction of a remedy in ocular therapeutics, which exceeds in value any hitherto known for trachoma and inveterate pannus.

Dr. DeWecker published in the *Annales d'Oculistique* of August, 1882, and again in the *Klinische Monatsblätter* of January, 1883, his experiments with the infusion of jequirity or licorice

bean, the seed of the *abrus precatorius*, a shrub belonging to the class of the dicotyledons, the order of leguminosa. He announces that the use of it by his method will rapidly cause a purulent or rather a *croupous* ophthalmia. It possesses all the advantages of inoculation of pus without any of its repugnant perilous features.

M. Melloe Oliveira, a Brazilian botanist claims that the abrus precatorious is indigenous to brazil, and non-translatable. It grows everywhere in Brazil, as well in the highlands as in the interior, or on the coast of the Amazon and the Plata. The root is employed in all torrid zones for the same use as licorice. The seeds or beans are red, lustrous, irregularly spheroidal in shape, hilum black, and so hard that they are used for making necklaces and other ornaments.

The abrus precatorius has been used for many years in Brazil empirically, as a remedy for the granulated eyes, and came to Dr. DeWecker through a patient who had been cured by its use.

The infusion must be prepared according to the following formula:

Pulverize 32 fresh beans, macerate them in 500 grammes of cold water during 24 hours, then add 500 grammes of hot water and filter immediately after cooling.

Brushed upon the innner surface of the lids or instilled into the eye, or applied on a linen compress to the surface of the lids, the infusion will produce within a few days a most decided croupous and purulent conjunctivitis, which after the discontinuance of the irritating agent rapidly subsides, leaving the previously trachomatous lids without a trace of granulations, and a previously opaque cornea, without a vestige of infiltration and vascularity.

The intensity of the inflammation is perfectly under control and can be regulated by the frequency and strength of the applications which if carried too far, the inflammation may assume a diphtheritic character, and cause a desquamation of the cornea, which however is only circumscribed and readily passes away.

Dr. DeWecker thinks that the jequirity develops the vegetable ferment upon the diseased conjunctiva which prevents the evolution of new granulations, and is destructive to those already formed. A remedy so greatly recommended by such a high authority as Dr. DeWecker, and strongly endorsed by experiments of the eminent oculists as Dr. Gruening, of New York, and Dr. Brown of Syracuse, I did not hesitate to try myself, the more so, as I had several intractable cases on hand,

chronic hangers on at my clinic and in my private practice, which seemed to defy every remedy hitherto tried.

I sent for a fresh infusion of jequirity to Mr. Richard Fingerhut, 404 Fourth Ave., Corner of 28th St., New York, who is famous for making special pharmaceutical preparations.

The following cases will entirely bear outall that has been said about jequirity by Dr. DeWecker and others :

CASE I.—F. R. F., of Illinois, aged 38, had contracted the "common sore eyes," about three years ago, leaving the conjunctiva of the lids in a very granular condition, causing infiltration and nebulosity ot the cornea, and later a dense pannus. He had to be led when he first came to see me in October, 1882, and he has been under treatment more or less ever since. The usual remedies were assiduously applied, with only a moderately fair result, so that after a few months he could find his way alone, and even read large type, $\frac{1}{10}$ Snellen, but neither pannus nor trachoma had entirely subsided and would even recur at the least provocation.

I determined to try the effect of jequirity on him. I told him "I would have to make him much worse in order to make him well." The jequirity was brushed over the entire palpebral conjunctiva with a camel's hair pencil. A small compress of lint was saturated with it, and applied over the lids. I allowed him to go home, trusting to his intelligent wife to carry out my directions. This was on Tuesday. On Friday following he returned completely demoralized. The lids were enormously swollen, closed, purulent secretion abundant, but neither pain nor fever. On everting the lids, I found the conjunctiva lined with croupous deposit. I stopped the further use of the jequirity, and ordered cleansing the eyes with tepid water and a soft sponge. Next day he was much improved, he could open his eyes, sight better. On Monday swelling of the lids had nearly subsided, but not the croupous deposit, the cornea much clearer. In ten days he presented himself again, exhibiting not the least trace of trachoma or pannus. The conjunctiva was smooth, the cornea clear, no lachrymation, sight $\frac{2}{6}$. This entire happy change had taken place in a fortnight.

CASE II. M. T., a woman 47 was an occasional attendantat the clinic for eighteen months, suffering from trachomatous pannus, unfitting her for the performance of the simplest household duties,

depending upon her little girl for nearly everything. Local application of the mitigated nitrate of silver, mild touches with sulphate of copper, etc., gave her only temporary relief. I thought this a fit case for the jequirity. I saw to it that the applications be properly made. In five days the purulent ophthalmia was fully established and a croupous deposit upon the entire conjunctiva. No pain and no constitutional disturbance. On the sixth day the further use of the jequirity was dispensed with and only frequent cleanliness enjoined. Amelioration of all the symptoms soon followed. I discharged her on the sixteenth day, with a smooth conjunctiva and a perfectly clear cornea. For the first time in many years, she is now able to read and sew.

Case III.—J. O'L., aged 40, an inmate of the hospital with a well pronounced trachomatous pannus, complicated however, with ozena, rhinopharyngitis, velum palati perforated in two places, presumed to be of syphilitic origin, though this is stoutly denied by the patient. He was under conjoined treatment of Dr. Glasgow and myself. Jequirity was tried on him in the same manner as in the preceeding cases. Purulent secretion ensued soon, so also a croupous deposit on the conjunctiva. This was kept up for two weeks. Trachoma and pannus yielded to its effect, not however the hyperæmia of the ocular conjunctiva which was accompanied with lachrymation and photophobia. I presume the condition of the nasopharynx will for some time yet influence the lining membrane of the eye, and that the constitutional treatment will have to be carried much further.

I regret that he left the hospital and prevented further observations.

Article II.

Medical Empiricisms, Homœopathy and Codes. By Romaine J. Curtiss, M. D., Joliet, Ill.

The medical profession at large are sufficiently enlightened on the present status of what many are pleased to call the old and new codes, or the New York Code, which is new, and the Code of the American Medical Association, which is old.

Dr. Austin Flint, in a sort of running commentary, something as an apologist, unites on the sentiments and parables of the holy text, has sufficiently made the matter of the old code plain and reasonable to those who want to believe; while Dr. Roosa has endeavored to uphold the claims of the new code, and after the manner of the speech of Talleyrand, has successfully covered up by his written articles on the subject, every sensible and real motive which could ever have prompted anybody to invent a code which should indiscriminately mix up the creeds, sciences, pathics and superstitions of medicines.

As we might expect the persons most nearly allied to the merits of these codes by business and locality, have not hesitated to name the probable fact that the real *animus* of the framers of the new code was business interest, as well as a conviction that there is not difference enough between the methods of empirical medicine and homœopathy to prevent amicable and satisfactory consultations between the two in cases of sickness.

Now to the careful student of medicine, and the close observer of social events, the present condition of "medicine" and homœopathy relating to codes and actual ethical conduct outside of codes relating to consultations, is not amatter of surprise, but has been rather a matter of prophesy; and to understand why this is so, let us define what is meant by empirical or rational medicine, and homœopathy.

In the first place, let us note that the word empiricism is a much abused word among physicians who deny that they are empiricists. The word means experiment, or a conclusion derived from trial. Empiricism is, therefore, a word which covers in its

meaning the expressive basis of the foundation of all sciences, even medical science. Empiricisms began with Bacon, and empiricism in science means nothing worse than experimental science, or conclusions, or facts derived from the conduct of experiments. Dr. Flint, in his running exegesis on the beatitudes of the old code, uses this word in the sense of quackery. It has no shadow of such meaning, nor can any perversion of the meaning of the word make it cover the ethical or professional conduct of a pretender in medicine. Empiricism is the method by which what is called rational medicine was established, and by which the position of rational medicine was reached at the present day; and empiricism is rational medicine as it is practiced to a very great extent to-day, in the absence of what may be called scientific medicine.

Empiricism is not scientific medicine, nor is rational medicine scientific; neither is homœopathy; and these two methods are nothing more than the opposite poles of the very same thing in medical art.

Let us first define rational medicine by special definitions relating to the action of medicines and the symptoms of disease, and then we will be able to formulate the general definition, and understand the relation to homœopathy, and both of these to scientific medicine.

The trial by experiment has resulted in the definite formulæ of drugs to each other, and of the antagonism of drugs to signs and symptoms; and it is by these therapeutical formulæ that medicine is practiced all over the world to-day, and it is by these very same formulæ that homœopathy is practiced. It was never learned by any other method than the empirical method that atropia is a physiological antidote to morphia; or that atropia is a physiological antidote to contraction of the pupils; or that it causes dryness of the throat, or lessens or increases the size of the capillaries; or lessens or increases the vascular tonus; or that it antagonizes weakness of the heart's action; or antagonizes cerebral hyperæmia, or causes congestion of the brain and delirium, all depending upon the dose.

Empiricism also has taught us that morphia is the antagonist of pain. Who ever learned this fact by raising popies or making an analytical or synthetic chemical examination of morphia, and studying the pathology of pain; that each is, to a certain extent, the antagonist of the other? This knowledge was gained by

experiment, and was learned before anybody ever knew the chemical synthesis of morphia, or believed that pain was anything but a ghost or an entity.

From centuries of experiment with drugs which were found to antagonize symptoms and signs, people have constructed considerable of a therapeutical system—certainly not a science of medicine.

They have classified symptoms and signs together by association and by likeness and unlikeness, into diseases, and were obliged to do this without reference to the cause or the antecedents, because they couldn't find out the cause or the antecedents, and then from the empirical knowledge, the rational physician and the homœopathic physican alike, have proceeded to give the medicines which "experiments" and "provings" have verified to be antagonistic to the signs and symptoms, but without reference to the antagonism of the drug to the antecedent of all the signs and symptoms, which in the aggregate are called a special disease.

Now so far as we have gone, both rational medicine and homœopathy, stand on precisely the same ground. Both treat diseases by giving drugs which antagonize symptoms, and if we take modern rational medicine, and modern homœopathy, we will find that they antagonize the same symptoms by opposite methods, or by opposite drugs in opposite doses, but on equally correct experimental principles! but both methods, though equally rational and empirical, are equally unscientific.

There is no medical science in the method of constructing or classifying a disease from signs and symptoms alone. There is no medical science in medicine if the cause is unknown; and to make medicine scientific, the antecedents of the signs and symptoms must be antagonized by medicine rather than the signs and symptoms themselves.

The antagonism of drugs to each other, and to pathological or rather physiological symptoms, or conditions, or functions is perhaps best studied in Prof. Bartholow's Cartwright lectures on this subject. The subject is here fully presented, and, as any one can see, the methods by which these facts of antagonism were known, were the methods of most laborious experimental empiricism. These methods consist in giving a drug to an animal either in small doses or large doses and then noting the effect on all functions of all organs, from the brain and nerves to the organs of secretion

and excretion. It is upon this basis that the treatment of disease is based. If it is found that a symptom of certain diseases is a too abundant perspiration, the empirical doctor will give a dose of oxide of zinc, because experiment has proven that these two things will antagonize each other; while the homœopath will give the minimum dose of atropia because his provings of the drug show that sweating and atropia are antagonistic.

I have said that both of these methods are unscientific because they both ignore the cause of the symptoms in their treatment. Of course, if the cause was known the remedy would be something which could antagonize the cause, and this would be scientific medicine, no matter whether the antagonistic drug was efficient in a small dose or a large dose.

But medicine, not being scientific because the factor of cause is unknown, the place of the unknown factor, in both empiricism and homœopathy, is supplied by a dogma to give medicine the appearance of being scientific. The logical construction of the human mind is antagonistic to the conception that the destruction or antagonism of the effects of an unknown cause can destroy the cause itself. What possible effect upon the tubercle baccillus could be brought about by the zinc or atropia which prevents the segment night sweats in the disease caused by this parasite?

The two dogmas, representing rational medicine and homœopathy, are of equal significance, but are simply opposite poles of the same dogmatic error. Rational medicine says the reason why drugs cure disease is because "unlike cures like," and the homœopath says: because "like cures like."

To a certain extent these dogmas are true, but they are equally true and equally untrue. They do not cover that ground of a disease which includes the symptoms and signs as sequences of a known cause, but carried to their logical conclusion their dogmatic nature is fully shown, and both systems are forced to admit that they mean by their dogmas that the cure or remedy in one case is something unlike the cause of disease, and in the other case it is something like the cause.

In fact, however, these dogmas are inductions from trials with drugs in the antagonism of signs and symptoms and the attempt to cover the cause of disease, simply makes them most rediculously absurd. Perhaps either of these schools can prescribe drugs which are antagonistic to the signs of an eruption on the skin in scabies, and to the symptoms of itching, which goes with

that disease; but how rediculous do the dogmas of "unlike cures like" and "like cures like" appear in the light of the known cause, and by remedies which relate not to the direct antagonism of signs and symptoms, but to the destruction of the cause; then we hear no more of rational medicine or homœopathy, but the medical treatment of disease becomes scientific.

Rational medicine and homœopathy are each based on the empirical trial of drugs in the antagonism of the segment signs and symptoms of disease. An examination of the action of drugs will fully account to us for the existence of these two schools' practice, and will fully explain why they stand on equal grounds of error and fact relating to the truth as it is in scientific medicine.

The principle of antagonism to each other, and to symptoms implies that two forces are acting more or less in opposition to each other. These forces are constituted by the physiological action of the drug, and whatever may resist the action of the drug, whether it is a physiological, or pathological force, or another drug. The new symptom, or drug symptom, or the segment modification of the physiological force, is the resultant of the drug action, resisted by whatever antagonizes it. If a certain dose of strychnia is given, the action of the drug is resisted by the integrity of the spinal cord, and the resultant is a change in the physiological action of the spinal cord, and other organs, for instance, perhaps the normal tention of the muscles is increased to a spasmodic contraction.

This illustrates the principle upon which drugs act when given to antagonize symptoms or functions, and upon this basis we can formulate the action of medicine, and show the true relations of rational medicine to homœopathy.

If the integrity of the spinal cord is normal, and a small dose of strychnia is given and the resultant of the two antagonistic forces may represent what we can conveniently represent by perhaps 10° or 15°. Now suppose a larger dose is given: the resultant may be 45° or 90°. If a still larger and larger dose is given, the resultant goes on around the circle to 125°, 145° and up to 180°, when we have the external effect of strychnia upon the spinal cord.

Now from the mathematical, therapeutical and physiological standpoint, all these resultants, representing different doses of the drug which are above 90°, are opposite to their corresponding resultants below 90°.

The minimum effect of strychnia is to weaken muscular action, while the extreme effect is to cause tetanic spasm, and the grades of action between these two extremes in physiology and pathology will correspond with all the degrees of the circle.

This same law may be illustrated by the effect of atropia upon the capillary circulation. A small dose, giving its minimum resultant, contracts the capillaries. In the largest dose the capillaries are distended. The effects of the opposite doses are opposite to each other.

We will say that hydrate of chloral is an antagonist to strychnia. Then small doses antagonize the small dose of strychnia, and large doses of each are likewise antagonistic.

Morphia is perhaps an antagonist of atropia, and if so a small dose of morphia will antagonize a small dose of atropia, and large doses of each are antagonistic.

From these data we find that a small dose of strichnia and a large dose of chloral have effects that are similar so far as their antagonistic action goes. If a large dose of chloral then weakens the muscles or relaxes spasm, a small dose of strychnia should do the same, and if a small dose of chlorol will cause spasm or increase muscular power, a large dose of strychnia will also cause spasm.

If a small dose of atropia contracts the capillaries, and morphia is an antidote, or antagonist to atropia, then a small dose of morphia should dilate the capillaries, and the dilated capillaries, from large doses of atropia, should be contracted by morphia.

From these data we find there are two legitimate methods of empirical practice of medicine, the rational practice, and the so-called homœopathic practice, as they are both practiced at the present time. It appears that large doses of some drugs accomplish the same resultants that small doses of other drugs will also accomplish and without doubt one of these methods is just as effectual as the other, in antagonizing symtoms, and they bear very similar relations of truth and error to the scientific medical practice, which we may say is the impending practice of the future.

In the light of these facts, let us for a moment examine the two dogmas of the two empirical schools: "unlike cures like," and "like cures like."

As we know very well, the primitive homœopath had no hesitation in proclaiming his dogma from the housetops, and in fact, both ancient and modern disciples of this method generally

prefer a housetop when they proclaim anything relating to medical practice. Even at the present time some homœopaths, and even some physicians who are not homœopaths, have no hesitation in making the claim that small doses of copaiba cure urticaria *because* large doses cause urticaria, etc. Now the converse of this is the dogma of the other empirical school, "unlike cures like," or a large dose of bromide of potassium will contract the bloodvessels in the brain *because* a large dose of quinine cures cerebral hyperæmia.

If there are any two dogmas on earth any more meaningless than these, I have never heard of them.

To illustrate the practical workings of these systems of symptomatic medicine, we will take the disease of consumption, and review the treatment by symptoms.

In consumption there is a morbid growth in the lungs, which both schools call "error of nutrition," symptomatic of this "error" there are cough, night sweats, emaciation, pain, diarrhœa, etc.

The cause of the error of nutrition being unknown, which causes the morbid growth in the lungs, the medical treatment is limited to the symptoms, with the understanding that the cause is unknown and the prognosis is "unfavorable."

Now both schools agree on the subject of nutrition. Both crowd the digestive organs to their highest capacity, with albumens and fats and alcohols.

The chief symptom is cough, and here is a great field for empirical effort. The different doctors use different medicines in different doses, to diminish the reflex irritation which provokes the cough. Large doses of opium are given on one hand and the small ends of many drugs are tried by the homœopath. The night sweats are treated similarly by empirical methods. On one hand a large dose of oxide of zinc or arom. sulph. acid is prescribed, and the homœopath is equally successful with his little pills of atropia.

The other symtoms are treated in the same way. The heat is abstracted in the same way. The heat is abstracted by local cold. On one hand empirical medicine prescribes large doses of quinine, which lessens the cell changes which cause heat, and the little end of aconite is given by the other school for the same purpose.

Now these are the true methods of empiricism in the treatment of diseases, the cause of which is unknown, and unmolested by the doctor. How do these physicians, then, "cure" disease?

Manifestly they do not cure it. If a symptom exists *per se*, a drug which is a physiological antidote to it, may antagonize the symptom out of existence. But symptoms do not exist *per se*. They must always have an antecedent; symptoms and signs are the methods by which a cause of disease destroys life. The heat of fever, the diarrhœa, sweats, inanition, cough, and tissue metamorphosis in the lungs are the methods by which the tubercle bacillus—the cause of consumption—destroys life. If the symptoms or methods of the cause of disease can be antagonized by drugs, until the cause itself is dead, the patient recovers; but if not, the termination is different. If the cause is of a character which is not selflimited as is, probably the cause of consumption, no amount of antagonism of symptoms by drugs, whether by the big or little end of drugs, will do any more than possibly prolong the life of the patient.

The method of empirical treatment of the zymotic diseases, as scarlatina, measles, typhoid, etc., is to antagonize the symptoms or methods by which the poison causes death, until the cause itself is dead by the law of the natural limitation of diseases of this character.

The scientific method of the treatment of disease implies that the cause is known and that there is a method known by which the cause of disease can be destroyed, or rather, prevented. The true science of medical treatment is to destroy the cause of disease before the disease is produced, if it can be done, kill the germ outside of the body if possible; but if not, then kill the germ inside of the body, is certainly a more efficient method of medical treatment than simply antagonizing the symptoms which are set up by the germ of disease.

We are at present standing on the brink of discoveries which must revolutionize the methods of physicians in the cure of diseases. If the cause of disease can be destroyed even after the symtoms have declared the nature of the cause, then, and not until then can it be said that disease is curable and that physicians really cure disease. The indications now are that physicians really cure disease. The indications now are that the brink of the great discovery upon which we are now standing, is that the cause of disease is some form of living thing—that infection and contagion are really *contagium virum*.

How obvious it is that if the cause of disease is really known, how short, thereafter, will be the life of empirical medicine.

There is no such thing known in the treatment of scabies as rational medicine or homœopathy. The symptoms and signs of this disease, the itching and eruption, are not treated at all, but the remedy is addressed to the cause, and balsam of Peru, or sulphur is found to cure this disease, because they can destroy disease, because they can destroy the life of the *contagium virum*.

Now, rational medicine, having become really rational, and having left off its old heroic inquisitional torments of fire, blisters, bleeding, and immense doses; and homœopathy having left off is superstitions about perennial *psora*, and infinitisimal elements, the two are seen to stand on the same therapeutical ground facing each other, one with a litttle pill of one drug, and the other with a big pill of another drug, which are found to precisely equal each other in therapeutical force, so far as the antagonism of symptoms goes. What else then could be expected than that the barriers which have separated them so long should be broken down. There is no possible ground of ethical or empirical distinction between these two physicians or classes or schools or methods, which should separate them ethically. If a small dose of a drug will antagonize a symptom as well as a large dose of some other drug, then one of these methods is no less ethical than the other. No matter which of them has the greatest merit of age, experience or knowledge of symptoms or antidotes, if one method is as good as the other, no matter how high the fence is between them, the fence must come down.

In a measure, and for temporary purposes, the New York New Code, therefore, has its basis in the right. All that is needed is to acknowledge the real facts of difference between the two professions, in order to destroy all the artificial ethics which have been built up between the two, so far as symptomatic doctoring goes, homœopathy stands on just as good grounds as any other of the methods of treating symptoms, and any charges which can be brought against it can also be brought against the rational method of practice, whether the charge is ethical or therapentical, where one has done too little the other has done too much. This feature is the historical feature. If one has a foolish dogma, so has the other. If one treats disease by antagonizing symptoms, the other also treats disease by antagonizing symptoms. If there is no science in one, then both are unscientific, and in short, whatever merit or demerit belongs to either, also belongs equally to the other.

But the destiny of pathy is to die. The "medicine" of the future is to be *preventitive medicine.* The practice of antagonizing symptoms by either pathical method is simply a confession that the cause of the disease is not known, or if known, there is no remedy known. The time must come when the ignorance relating to the destruction of the cause of disease will give way and when it does there will be no more empirical method—neither the present rational methods, or homœpathy. They will gradually merge together, and their methods grow old, and their very names be only repeated and remembered by the student of medical history."

When medicine becomes a science by the discovery of the cause of disease, and its prevention, neither one of these schools will ever attempt a cure of disease by the methods of their dogmas. The blatent voice of dogma in medicine will be as "silent as the grave." In the mean time, the interests of the schools in empiricism, if they deserve it, will probably be aided by the general adaption of the New York Code.

ARTICLE III.

A FEW THOUGHTS ON DIPHTHERIA. By F. W. ENTRIKEN, M. D., Prof. Diseases of Woman, in the Fort Wayne College of Medicine. Physician in Chief to the Cleveland Sanitary Home.

I am prompted at this time by an article in a recent number of your Journal, to send a few thoughts on Diphtheria, and the conclusions to which I have arrived after thirty years close observation, and study of the disease. In twenty five years active domestic practice in the north western counties of Ohio principally in Hancock Co. we encountered several severe epidemics, of the disease which afforded ample opportunity for study of its many forms, and gave us ideas of its fatality. I have read all I could find upon the subject, made many post mortems, sought, compared, and sifted the opinions of the best talent of the country with what little ability I possess.

I believe Diphtheria is both infectious and contagious, that one attack usually exempts the system from another. though the throat is very liable to diphtheritic appearances, after a severe attack from cold and like causes, and that this weakness of the structure of the throat may last many years. I am aware that the rule above, enunciated, is subject to many notable exceptions. But the same is true of Scarlet Fever, Measles, Small-Pox and like affections, usually regarded as protection againts future attacks.

I am fully persuaded that the disease is not at first local,[as many believe] but a constitutional disease with such local phenomenon as Pseudo membranous deposits in the naris over the fauces and palate in the box of the larynx, and on the tracheal and bronchial mucus surface and occasionally on the labia of the female, and prepuce of the male, intestinal mucus surface in the pelvis of the kidneys, in the uriniferous tubuli and as I have several times seen on the surface of the arachnoid membrane, in a very fatal epidemic of meningitis occurring in conjunction with Diphtheria. I am also persuaded that the tendency to fibro lymphoid deposits are dispersed throughout the body in many cases and have been detected in the lungs, heart and other parts.

These thoughts will not be new I know to those who have noted carefully the Current Journal literature for the last quarter of a century and read the writings of Slade, MacKenzie and others. I am fully persuaded that constitutional symptoms percede all local deposits and of sufficient severity to be notable, if looked for. I am not unaware that septicæmia and severe secondary fever may occur, from absorption of the septic elements that are generated in the naris or throat under putrid and partly detached false membranes and behind this it is much more likely to occur, if the throat is disturbed by rough efforts to detach the membranous deposit or parts denuded by rough efforts, with the probang or port caustic. The disease defibrinates the blood and so does mercury. With me, it is a cardinal principal of treatment to avoid all depressing agents that act by defibrinating the blood, or retarding digestion, or assimilation. I am sure that those children who are subject to Laryngo Bronchial Catarrh, and croup are most likely to have the disease invade the air passages below the glotis. I am of the opinion that the micrococi theory is untenable, though fully aware that these low organisms, swarm in the fluids and permeate the membranous

deposits on the throat, In these cases, I almost daily demonstrate their existence in the fluids from the throat and nasal passages of those with ordinary sore throat as well as those with but slight catarrhal troubles. I have had good success with Chlorate of potash, in diphtheria given in connection with tincture of iron. Small and repeated doses of Quinine given in solution in syrup or water, to secure its local as well as general effect. I have great faith in the antiseptic effect of alcohol and give whiskey toddy freely in all bad cases of diphtheria. I have also used locally with the atomizer and internally, in place of the Chlorate of Potash, and Iron, the liquid Bisulphide of Soda. But of late years, while giving Quinia with liquid Bisulphide of Soda and whiskey internally, have as suggested by MacKenzie used with an atomizer localy, a three percent solution of Hydrate of Chloral. This agent thus applied, I find to improve local symptoms, and diminish the danger of secondary fever from septic absorption, as well that unpleasant sequile paralysis of the palate and adjacent structures prone to follow this disease.

I have recently read the manuscript of a book about to be published, by Dr. Galentine of this city which I regard as a most excellent treatise given, compiled in a concise form. About all that is known of the disease at present, or has been known in the past. The Dr. has had quite an experience with Diphtheria, and appears for many years to have studied it carefully. He says he approaches the treatment of a bad case with as much assurance of success in the use of his remedies as he does a case of Intermittent Fever, assured that Quinia will arrest it and ameliorate all its symptoms. In view of the importance of the subject I know the Dr. will excuse me for noting the peculiarities of his treatment, while he meets in the usual way the varied complications that may arise during the course, and as the sequel of Diphtheria and treats the throat and naris by lime vapor, especially in those cases involving the larynx and deeper air passages. He recommends after MacKenzie the three percent solution of Hydrate of Chloral, to be used with an atomizer for a short time, as frequent as every hour [in bad cases] He gives internally with or without Chlorate of Potash, small and repeated doses of Hydrate of Chloral, in such doses as to cause slight drowsiness. If given every two to four hours. It is a prevention and assures me it modifies the disease if it does not, as it usually does, prevents it; he gives it from the first and so long as there is any

danger. I am assured by physicians in that part of the city [as well as by Dr. Galentine] that the false membrane is often prevented, if it has not formed before the treatment is commenced. If present, it soon dissolves or seperates, all the constitutional symptoms are amended, and the patient is soon convalescent. Dr. Galentine assures me that his failures were frequent under the usual appended plans of treatment, but since, the plan recommended in four hundred cases of well marked Diphtheria so bad as to make a mistake in diagnosis impossible the losses have been less than two precent.

ARTICLE IV.

IRON IN MEDICINE. By E. BENKENDORF, M. D., of St. Louis.

The therapeutic means of the age preceding ours were greatly directed to the removal of some fancied obnoxious material accumulated in the system. At a subsequent time this view of treatment changed into a somewhat different one as soon as the conviction had forced itself upon the medical mind that it is accumulations of forces which would best contribute to successful treatment.

Force being dependent on material, and as material must be continually supplied to the body, there to be changed into a fit state to be imparted to the blood, we can understand why auditory and not subtractive treatment suggested itself as a new phase in medicine. The former chiefly consits, if we may so express ourselves, in employing therapeutic agents being eligible for either constituting some elements of our tissues or for developing forces, to enable the tissues to appropriate their required elements from the nourishment introduced into the body, or brought into contact with it. The ideal conception of therapeutic art ought, in consequence, be such as will lead to a certainty of guiding the constitutional laws so as to enable us to govern circumstances to such a degree as to supply fit material for the evolution of such forces

as make up the regulating antagonism between physical and vital combinations.

In spite of this, however, the same remedies are now used as were prescribed formerly, and they are more or less found to be now, also, useful in the cure of the same diseases as former experience had proved them to be efficacious at that time.

Iron, at present a fashionable and unquestionably beneficial remedy, has come to us from remote antiquity. Since then, chemistry having discovered that blood contains iron, and that it is indebted to iron for its oxygenizing quality, its therapeutic importance has been largely increased. Blood being truly the pabulum of life, and blood not being blood without containing a certain amount of iron, are inducements enough to make this metal a remedy to be taken nearly daily into requisition. Its influence over disease may be said to be either local or constitutional. We should call its effects "local" if it acts directly on the parts with which it came in contact, either mechanically, or by the vital action it engenders by its local reaction. Its "constitutional" action ought to be inferred, if it was absorbed and carried thus through the blood to different tissues, in this way curing by nutrition. The reflex action of the nervous system can, however, change a local effect into one apparently constitutional, and this will then manifest itself as a local effect by acting only on one locality, although its remedial power had been placed at the disposal of the fluids circulating in the body.

Some of the Therapeutic Uses of Iron.

Iron, if externally applied, is often remedial of skin diseases, ulcers, and hæmorrhages from broken surfaces. It acts in these cases by local contact with a nerve expansion, and by thus producing a curative influence which is communicated to the capillaries. This may be done primarily, by contact, or secondarily, by reflexion.

In some cases its internal use, as when employed in erysipelas, must at best be explained on the ground of being an antiseptic. This it is by chemical and not by vital virtues. And in no other way can it possibly cure erysipelas when given internally, considering that there is no time sufficient to change the blood for nutritive purposes, and that patients may remain

anæmic, although they are thought to have owed their convalescence to the the internal use of ferrum.

Other curative results of iron treatment may be owing to the possibility of the metal in question setting free oxygen on its forming of ozone, and carbonic acid by its entering into combinations with other elements simultaneously set free in the body.

Speaking of the hæmostatic effect we can hardly mean anything else than that this effect is produced by local impressions instituting the vital act of contraction. The hæmostatic effect results from the impressibility of nerves forcing capillaries to contract. The impression may even be reflected to a remote part, and there produce the same vital effect of contraction as it would do in the part directly impressed, if such part should be in need of the controlling influence.

A mere effusion of blood from exosmosis can be arrested by improved conditions of blood. Here, it is understood, that the hæmorrhage depends on a faulty state of the blood, whereby it leakes through the walls of the vessels, and not on want of contractiicity of the capillaries themselves.

As a striking example of vital nerve action being chiefly instrumental in arresting hæmorrhages, let us remember the frequent arrest or increase of hæmorrhage by the force of psychosis. Mental impressions, as we know, can arrest or renew bleeding, and, even primarily produce it.

Amenorrhœa, chlorosis, menorrhagia and cachexia are known often to be cured by iron. All these diseases depend on want of vital actions, and such actions may be set into motion by iron, be it by its "local" or "constitutional" influence developed in the system.

Much of the good coming from the taking of ferrum to debilitated females is referable to its laxative effect. Such is produced by its coming in contact with the mucous membrane of the bowels, and thus rousing the hypogastric nerve into healthful activity. An inervation of all the nerve centers may follow this local impulse given to the bowels.

By virtue of its antiseptic effects iron can cause a suspension of the dioganizing process going on by the introduction of foreign germs injurious to health. But the fever produced by malaria will not yield to iron. It can, however, assist in restoring normal secresions and greater health, after the fever has been

cured. It is our opinion that we can not *cure malarial fever by acting on the secretions, but that the cure of the fever will help to restore normal secretions.*

The nutritive change effected in the blood by iron, is great and not to be undervalued. On it depend many of its cures, and this has secured to iron the reputation of being "a tonic" nearly under all circumstances and at all times. The patient reader will remember that it depends on the acumen of the observer whether he shall establish to his mind's satisfaction the local or constitutional effect of iron, having either of them been the first or second link in the chain of therapeutic actions.

Experience and experiment have taught us the therapeutic employment of iron and progressive science, and unbiased judgment in another direction have also taught us that certain diseases can get well without iron, although this remedy be considered a trusty one for them, and perhaps be urged to be used from our experience, and the great value that is placed upon that of others. It is well known that hydropathic treatment has cured anæmia and debility from cachexia, when nourishing food and the best elixirs of iron had failed to do so. Chlorosis and amenorrhœa have been cured by country air, the patient, whilst taking, perhaps, food less rich in iron than he was in the habit of taking when in the city. Others, although remaining in the city, were also cured without iron as soon as they had been placed under the influence of *vitalizing psychical* impressions. Even treatment consisting of saline remedies has been known to cure infantile cachexia, although iron in the form of medicine had formed no adjuvant to the therapeutic allowance.

Neither can it be denied that chlorotic, and even anæmic patients, without changing their residences, or mode of living or diet, without the assistance of iron, have frequently been cured by spstematic exercise alone. This would argue that the life forces to be put in motion need but little iron in the blood, but that the may also be powerfully set in motion by the medical use of iron.

From what has been said we may conclude that iron will likely, for some time, continue to be one of our best remedies. Its negative harmfulness is far overbalanced by the positive good which it is able to effect in so many different ways.

Translations.

Article V.

FROM THE FRENCH.

Excerpts from Late French Journals. By S. Pollak, M. D., of St. Louis.

Reported for the Journal.

Anthropological.—M. Martineau exhibited a cast of a chancre, which he succeeded in developing, by inoculation upon the penis of an ape. He claims this being the first successful experiment of syphilitic inoculation in animals. He has however been preceded by Klebs, who in 1879, had obtained in a monkey not only primitive but also tertiary accidents such as osseous and visceral lesions, identical with those, which are considered as characteristic of syphilis in man. These experiments have been realized by means of culture-liquid, containing fragments of hard chancre.—[*Progres Medical.*

The Poisoned Arrows of the North American Indians. M. Hoffmann states, that North and South American Indians understood very well, how to prepare various substances, by means of which they poisoned their arrows. Now since the use of fire arms has become so extensive the old custum is gradually disappearing, and it is very difficult to obtain any information on that subject. The method of preparing toxic substances are various, their activity depends upon the care and attention given in their preparation by the sorcerer or chief. The Comanches make use of a plant, the pod of which they pierce with their arrows; they must fast during that time. Other North American Indians dip the points into menstrual blood, for the savages of the present, as the Romans of antiquity consider woman impure, while menstruating.

The Apaches crush the heads of rattle-snakes with the liver of the hart or stag, leaving this mixture to putrify, then plunge the arrows in it, and letting them dry in the air. The author

has examined the arrowpoints thus prepared, and found them covered with blood and viperine. The Chinooks used poisoned arrows only in war. They prepare them thus. A rattle snake is irritated, until it bites itself, the arrow is dipped in the blood which flows from the wounds. Men wounded with such an arrow die within three days, and sooner if he is zerna. There is another method. A nest of savage bees is shaken, until they are much irritated, then they are crushed in a mortar, and the arrow dipped in the mixture. The toxic property is probably due to formic acid; however such wounds are not always fatal, but cause long protracted sickness. Red ants are also used in the same manner. The prick of the arrow causes violent local pains, and very painful sensation in the pharynx. There is traumatic fever, delirium, and a dibility from which there is no recovery in a month according to M. Lagneau, this was a wide spread sage of Europe in antiquity. G. Saint Hilaire has long since pointed out the grooves, which prehistoric arrows present, as being due, to a like usage. This custome has perpectuated itself until the fifth century. The French used to poison their arrows. Generally they used vegetable substances, in the nature of which, they were frequently mistaken. Aristotle points out the figtree, which is certainly harmless. Paul d'Egine mentions having tended Dalmatian soldiers wounded with poisoned arrows of helenrum and linium also of the yewtree which are moffansive. The Yasiges of the borders of the Danube made use of the blood of Chidren, accasionally also of the venon of vipers. —[*Progres Medical.*

Dr. Canvin in his studies on the genital evolutions of Hindoo woman, has demonstrated, that through genesic excitability occurs earlier in Hindoo girls, they do not menstruate earlier than the european on the same isothermal line. The menopause is later with the Hindoos, but this does not signify, that their ovulative faculties persist longer than in european. The duration of menstruation is just the same 3-5 days so is also the interval 25-28 days. Hindoo women are very prolific. The dental evolution of Hindoo children is much earlier.—[*Progres Medical.*

Dr. Bordier after having exhibited a series of photographs of three classes of criminals. 1. Assasins. 2. violation of chas-

tity. 3. thieves, pointed out the great analogy of type which each category presents. He thinks, that moral troubles are the result of physical cerebral lesions, and are inseperable from the morphological troubles of the rest of the body, especially of the head and face. The ears of assassins are generally large, and stand off the head. [*Progres Medical.*

THERAPEUTICAL.

SALICYLATE OF SODA.—The immese serrices rendered to therapy by the Salicylate of soda are not contestible. Its remarkable efficacy in the treatment of articular rheumatism is well established. According to Prof. Vulyrian, it will cure acute articular rheumatism in two or three days.

Prof. Seer teaches, that it will act with the same efficiency in children as in adults. Dr. Archambault says, In acute and subacute articular rheumatism, in scarlatinous rheumatism, pain, redness and swelling will disappear in two or three days use of salicylate of soda, and not only that, but it will prevent rheumatic anæmia. It is well known how rapidly articular rheumatism destroys the red blood globules, anæmia increases with the duration of the disease, convalescense is very slow, on account of the impoverished condition of the blood; Salicylate of soda while it cuts short the duration of rhuematism, arrests also from the beginning the destructive process of the red blood globules [Vulquan] and prevents totally rheumatic anæmia—See" It is always successfully employed in tetanic, or painful muscular contraction of the extremities, and especially in acute torticolis.

Prof. Abadie thinks many affections of the Eye are of rheumatic origin, and he uses the S.S.with great success especially in rheumatic iritis.

It is equally efficacions in acute gout, which is ordinarily of uncertain duration not less than two or three weeks if left to itself, but it immeasurably shortened by the S.S. Dr. Campagnon prescribes it with good result in nodose rhuematism. where there are concretions of phosphates on the joints, not only causing pain but largely impede motion. It not only quiets the pain, restores in part the mobility of the joints, but effectually stops the progress of the disease, provided however the remedy is quite pure, which is unfortunately not always the case Dr. Charrier relates a case of a woman printer who has been suf-

fering atrocious pains from articular nodosities, with deformities of all her fingers. She has been taking for the last two years four grammes of salicylate of soda, and the pains ceased. The nodosities have neither increased nor diminished, and she is able to to continue at her work. Dr. Hollopean recognised its antipyretic properties, and has combined it with sulph. quinine in febrile diseases and also typhoid fever where it rapidly lowered the temperature. It has alsobeen found beneficial in erysipelas and in diabetes. Dr. Kamen of Pragne noticed that S.S. increases the weight of the body while retarding nutritive changes. According to Prof. See S.S. should always be given in solution. New soluble S.S. is impure and produces disastrous effect upon the throat and stomach. It should never be given in pills, pastiles, powders, etc. Every tablespoonfull should contain two grammes of S.S. and teaspoonfull fifty, centig.

BROMIDES IN NAUSEA AND VOMITING.—[Dr. Cheron, *Archives de Toxocologie*] has found that great benefit results from the administration of bromides in an effervescing mixture in the persistent nausea and vomiting so often seen in women with uterine affection. His formula is

1. Bicarb-potass., Bromide potass. āā ʒss. Water ʒiiss.
2. Citric acid ʒj., Syrup ʒx., Water ʒiv.

M. S. Add a teaspoonful of No. 1 to a tablespoonful of No. 2 and drink immediately.

This dose may be repeated every half hour. In localized pelvic peritonitis, this mixture often arrest the tendency to vomit, even in the acute stage.

CASTOR OIL AND GLYCERINE AS A PURGATIVE.—Mr. Sloper recommends a combination of castor oil and glycerine, in equal parts, as being an efficient purgative. The best form is that of semi solid, of which a small teaspoonful is an efficient dose, its effect seems lasting and it does not need continued renewal. The compound may be flavored, with lemon.—[*Lancet.*

PYROGALLIC ACID USED BY FRICTION IN PSORIASIS. Dr. Besnier uses a five per cent unguent in that intractable disease with success. Toxcæmia has however frequently resulted, which is easily recognised by the changes in the urine, which is black or-

greenish black (Hæmoglobinuria) or very red (Hæmaturia) in the last also albuminous, although there is no sign of a disease of kidneys or bladder. The antidote are a ether injection, alcohol, inhalation of oxygen, synapism.—[*Ann. of dermatol.*

PYROGALLIC ACID IN SIMPLE PHAGEDENIC CHANCRE. Fast spreading chancres which resisted iodoform, the actual cautery, are quickly arrested by a four per cent salve of pyrogallic acid. The ulcers quickly lose their virulence, and normal granulations spring up which are then treated like common ulcers. Phagedenas in cavities can be treated with the same in powder, instead of salve one part of pyrogallic and to four of starch.—[*Vidal. la semaine Med.*

PSYCHIATRICAL.

FUNCTIONAL INDEPENDENCE OF EACH CEREBRAL HEMISPHERE, which Dumontpallier demonstrated before a number of medical experts by the following experiments. An hysterical epileptic woman was hypnotised by pressure upon the vertex. She is told to take up the knitting which was laying by her side. She took it with both hands and commenced knitting. A pressure upon the left parietal bone, arrests the motion of the right hand, while the left continues to work. The like effect is produced on the left hand, when the right parietal is pressed upon. Pressure upon the crown of the head causes her to awake. Consequently central pressure causes equal reflex action upon both hemispheres, while lateral pressure effects only one hemisphere, the opposite of the pressure.

He provoked Illusions, hallucinations unilateral or bilateral. Another patient is hypnotised by a look. He plases the tips of her finger upon her lips, and stays her arm as if about to throw a kiss. She maintains that position, with a smiling expression of the left side of her face. At the same time, he brings her right arm into the position, as if wanting to repel some unpleasant object. She retains this attitude, the right side of her face assumes the expression of horror, while the left side, smiles. The firm angered features of a commander are seen on the right side those of gentleness and benevolence on the left side. In this experiment the muscular action of each side, has excited in the contralateral hemisphere a sentiment or an image, which manifested itself in the same side of the face.—[*Gaz. des Hosp.*

FROM THE GERMAN.

ARTICLE VI.

EXCERPTS FROM LATE GERMAN JOURNALS. By S. POLLAK, M. D., of St. Louis.

Reported for the JOURNAL.

THERAPEUTICAL.

QUININE IN LARGE DOSES IN DISEASES OF THE EAR.—Dr. Voltolini (*Monatsschrift für Ohrenheilkunde.*) The prompt beneficial effect of Quinine in Otolgy has long since been announced by Weber Liel and Voltolini, but the abuse of it has been productive of bad results. Large doses even if only once given may provoke extremely grave ocular and aural trouble, which disappear only after a long time, and some become permanent. Total deafness can ensue, which is owing to a hyperæmia of the labyrinth, as demonstrated by Kirchner in experments on animals and which can only be combated by vigorous antiphlogistic treatment.

HYPERMANGANESE OF POTASS IN THE TREATMENT OF AMENORRHŒA. W. Murrell recommends the internal use of hypermanganese of potass as an emenagogue. He used in fourteen months in 66 cases. It is given in solution or better in pills in dose of 0·06 grammes, three times a day, which is gradually increased to 0.12 grammes, four times a day. In most cases improvement begins in a few days, others have to use it many months. It is most effective with girls of 14 or 16 who had not menstruated yet, but nearly as well in those from 18 to 25 years of age and quite good yet in still older females. Gravidity is always excluded, though abortion is not produced by it in small doses. It is quite negative in phthisical patients.—[*Med. Zeitung.*

BRONCHIAL ASTHMA.—Dr. Berg Leyden found in the sputum of asthmatics mycroscopic crystals which irritate the nerve filaments of the vagus in the bronchioles, and thus cause the asth-

matic paroxisms. Berg found that carbolic acid will cause shrinkage of these crystals. He therefore advises inhalation, of a one per cent solution of carbolic acid. All, but the two far advanced cases, found prompt relief.—[*Med. Zeitung.*

Vigier [Gaz. hebdam.] points out that glycerin in shape of unquents, prevents the absorption of medicaments by the skin. Inunction of 10 Grm. of Iod. potass in 30 Grm. of glycerin, never showed Iodine in the urine, but as soon as fat substituted for the glycerin, Iodine reaction was seen in the urine. Morphine or atropine salve with glycerin produce no effect.

The attendents in the medical Schools of Vienna is so large that all the lecture rooms are found entirely two small; physicans flock there from all parts of the world to receive their finishing touches, cheifly specialists. 127. from United States, 10 Brazil, Greece, Rumania, Russia, North and South Germany, Switzerland, France, Scandanavia. Turkey, China, Japan send inumerable candidates.—[*Med. Zeitung.*

A LIFE SAVING INFUSION OF SOLUTION OF MURIATE OF SODA, IN ACUTE ANÆMIA.—A woman of thirty four years relapsed into a condition of extreme anæmia, in consequence of an enormous metrorrhagia after an abortion. A six per cent solution of chloride of soda was injected into the well exposed Vena media basilica, which was carefully ligated at the periphery, by which this almost moribund person was recalled to life. The venous infusion is preferred to the arterial, because it is easier executed, it is absolutely harmless, and 3 the vena mediana is easier found in anæmic person, than an empty arteria radialis.—[*Kurtner. Deutsche Med. Vochenschrift.*

THE INFLUENCE OF ERYSIPALAS UPON SYPHILIS. Obervations made in the dermatological clinic of Prof. Pick in Prague by Dr. Strack. Two cases of gumma-dermal ulcers, were cured in a few days by an intercurrent erysipelas. In a third case, under a like complication not only syphiloid ulcers, but also cicatricial-cheloides, disappeared completely.—[*Prager Med. Vochenschrift.*

AN AUTOGRAPHIC WOMAN.—Dr. Behrend presented a woman of fifty-two before the Medical Society of Berlin on whom lines

gently drawn with an obtuse instrument, such as a lead pencil or a quill, would turn red, small granular elevations would be seen on these lines which were projections of follicles of the skin. Very soon interfollicular spaces would be filled up and raised, attended by pruritus. These lines can be drawn fancifully, and yet always have the same character of relieves. This is occasionally seen in hysterical woman with complete anæsthesia of the skin but the present case was one of urticaria factitia In 1860, Sir. Wm. Gull had a like case, he ascribed it to contraction of the smooth muscular fibres of the skin, a dermatospasm which can be relieved by the application of antispasmodics, such as cloroform, ether, but these remedies failed to produce the same effect here. Dr. B. these belts are real exudations in the chorium, an acute œdema of the same, as is usual in Urticaria.—[*Dutsche Med. Zeitung.*

ELECTRICAL MASSAGE AND ELECTRICAL GYMNASTIC.—Dr. Stein of Frankfort on the Maine, recommends it in neuroasthenia. The patient being nude, is belabored with positive and negative poles of an induction apparatus. The electric gymnastic is practiced, by the patient holding two metal handles, in each hand which are connected with the the induction apparatus. The patient takes then divers physical exercises, which are much accelerated by it. A faradic current to the spine will excite the muscular contractions.—[*Wien. Med. Press.*

A PECULIAR FORM OF GENERAL ATROPHY AFTER DIPHTHERIA, probably of a trophoneurotic nature.—[*Berlin Klin. Wochenschrift.*] Dr. Cahn has seen, at Kussmauls clinic, a patient aged fourteen who after a mild pharyngeal diphtheria, a paralysis of the œsophagus to subvene which gradually changed into simple difficulty of swallowing. He felt at the lower end of the sternum a keen pain after eating, and after five minutes the food regurgitated, mixed with transparent mucus, which also subsided after a while. He then ate a sufficiency of food, but yet he fell off visibly was losing flesh rapidly, so that death from inanition threatened. Tonics and galvanic current along the spine relieved him. This was a grave case of paralysis of the striped and smooth muscular fibres of the œsophagus, accompanyed by paralysis of the pharynx, and also a serious disturbance of assi-

milation. Food was well digested, secretions normal, yet he gained neither flesh nor fat. It is assumed, that with the paralysis of the motor, vasomotor and sensory nerves the trophic nerves to have been implicated.

ARTICLE VII.

THE MORPHINE HABIT (MORPHISMUS). From the *Wiener Medizinische Wochenschrift*. By M. J. EPSTEIN, M. D., of St. Louis.

Translated for the JOURNAL.

By morphinismus we designate all those morbid symptoms which invariably follow the prolonged and regular use of morphine, whether administered internally or hypodermically.

ETIOLOGY.

The morphine disease is a comparatively new one, it being not more than twelve years ago when the general attention of the profession was called to this unknown malady. Experience teaches that the quantity of morphine used daily is of less importance than the time during which it has been continuously employed. I have seen all the symptoms of morphinismus follow the sudden withdrawal of an exceedingly small dose($\frac{1}{35}$ to $\frac{1}{20}$ gr. morph. mur.) after the drug had been used for several years. Such cases are, however, extremely rare, as the system early accustoms itself to the remedy, and then there is an urgent necessity for increasing the dose.

When morphine has been used daily for several weeks, the desire for the drug manifests itself so strongly that a withdrawal is borne with difficulty, which increases in proportion to the length of time during which the drug has been continuously administered.

The cases which lead to the first employment of morphine are very numerous. Frequently it is prescribed to allay the persistent pains of neuralgia. Not uncommonly has it been employed in psychical disturbances and the accompanying insomnia.

The saddest victims of this disease are physicians who experimented with morphine upon themselves, in order to study its action. I remember a young physician who for a long time had been treating a patient suffering from cancer of the stomach, with injections of morphine. When these were withdrawn the patient became greatly excited and urgently demanded the injections. As the morphine disease was barely known at that time (1869), the physician wanted to test upon himself whether the patient did not simulate and began using injections, from which he could never part to this day. Persons addicted to the morphine habit not infrequently induce their friends to use the drug.

It is well known that some persons cannot tolerate morphine, or at least very poorly. In some individuals it produces excitement or tranquility of the most delightful nature, and after they have tasted the pleasures of the vice—even before it is a vice—then the most trivial causes are sufficient to induce them to resort to morphine again, until they become so addicted to the habit that they can no more rid themselves of it than they could of their own shadows.

It deserves mention that in this class of persons we find individuals who are predisposed to nervous diseases, who are members of families in which neuroses repeatedly occurred. We therefore find among those addicted to this habit, many persons who never possessed normal nervous systems even before they indulged in morphine. Such indididuals would not only resort to morphine more readily, but lack the moral courage to free themselves of the habit.

Men are more frequently addicted to its use than women. Among 194 cases, there were 143 males and 51 females. Of the 143 males, 67 were physicians.

The morphine habit and its evil consequences appear after the internal administration of the drug as well as after the hypodermic method. The majority of the victims use injections, perhaps because the effect of the drug is more pronounced.

The daily quantity of morphine used varies greatly. It has not been proven that more than 3.5 (52 grains) daily has been tolerated.

[TO BE CONTINUED.]

Clinical Lecture.

Article VIII.

Extracts of Clinical Lectures Delivered by Edw. Borck, A. M., M. D., Prof. of Surgical Diseases of Children, and Clinical Surgery, College for Medical Practitioners of St. Louis, Mo. [Reported for the Journal by H. Marks, M. D., of St. Louis, Mo.]

In our last lecture we studied the injuries of the femur, fractures and dislocation. For the consideration of inflammation of the hip joint, we will devote an extra hour. Let us now see what we do remember about the knee joint. This joint is perfectly superficial and its landmarks are very easy to be distinguished by the touch and sight; there is no other joint in the body where a correct diagnosis can be made with so much certainty as here. Every joint can be interpreted, therefore is the study of the injuries of this joint a favorite with the beginner; and the old practioner continues to be in love with it because he gained in an easy way the knowledge to make a diagnosis and therefore has confidence in his examinations.

Dislocations and fractures of the knee joint are comparatively easy to be distinguished and with care can not be mistaken [*here followed explanation of the differential diagnosis*].

If we meet with open wounds of the knee, it is natural that we examine them by the touch and there is no difficulty about that.

But we have some subcutaneous injuries which we cannot behold with the eye, but have to reveal them by combination. These are ruptures of the ligaments.

If the internal ligament is ruptured, we can rotate the leg outward, and if we bend the leg in an acute angle we can feel a depression; there can also be produced a slight degree of abduction by our manipulation. The external ligament is seldom ruptured. Of course, if there is much swelling, the diagnosis is more difficult, but one must not be afraid to examine thoroughly.

And let us remember that if we can superextend the leg upon

the thigh, we must have rupture of the crucial ligaments. If we can abduct the leg, we have rupture of the internal ligament. If both symptoms are present we can rotate the leg upon its own axis.

Now let us take a case of acute exudation in the knee joint as an example, and let us ask the question: what are the local signs produced by the same, and how are we to prove that the swelling is produced by the intracapsular infusion? Please remember, that like with all the other joints, we want a positive answer to a positive question; we must not guess, we must know. Now if you go up into the dissecting room and drill a hole into the patella and inject it full of fluid, you will observe a peculiar contour produced by that extension of the capsule. We can observe how the patella is elevated and the whole knee is swelled up thereby. The fluid runs between the condyles of the femur and the patella, and we have the configuration of an expanded synovial cavity. This shape is characteristic. Please recall to your minds, the frozen sections which I showed you a few days ago, which were made after injection with water, and how beautiful you could see the expanded synovial of the knee.

It would pay you well if you would follow my advice and so inject all the cavities of the joints and study them for yourself by actual experiments.

However, I will make here upon the blackboard a drawing of the shape of the normal knee, and here one as it does appear when filled with fluid. We can see the difference at a glance. Here we see the depression on either side of the patella, and here the contours of the patella have entirely disappeared. Above the patella is also a swelling extending about from two to three inches upward; its boundary is convex. This is produced by that part of the synovial sac which lays under the quadriceps tendon, and which communicates with the cavity of the knee by an opening, and consequently must also be filled up with fluid. Just as we can produce this upon the cadaver, exactly so we find it in actual exudations in life.

Now after we have learned what kind of swelling is produced by an exudation, how are we to prove that it is intra-articular?

Some may contend that the swelling is extra-articular. The answer is easy; if there is fluid present in the joint, we can press the patella back with our finger; as soon as this pressure

is relieved, the patella will spring forward again. This ballottement is a positive proof.

Ah! I tell you the study of the diseases and injuries of the joints are pretty, very pretty. Let us see then what we do remember of the ankle joint and again, let me say to you, if you wish to become a good diagnostician, you will have to study these diseases upon the cadaver, and in no case does it pay better than in this joint. For by injecting fluid into the joint we can produce artificially the same swelling, the same configuration, the same boundary lines, as nature produces them by disease. But we do not meet with a chronic inflammatory exudation within this joint very often; therefore we are not so familiar with its form and appearance as we are with the extra-articular inflammatory processes, which do occur here very often.

For the benefit of those gentlemen who did not see the rare case which I presented to you the other day, and for the benefit of those who have not as yet made the experiment upon the cadaver, I will say that an ankle joint well filled up with fluid, shows a greater diameter transversely, and as the bones here are covered with but skin, and if we can feel the bones distinct, notwithstanding the increase in the diameter, we at once are pressed to the conclusion that such expansion must have been produced by internal swelling, or by enlargement of the bones themselves.

If the latter are normal, we exclude them, and only have to study what form or shape is produced by the expanded capsule. The bulges out on four points, two swellings we observe anteriorly on both sides of the tendon of the extensors, and two smaller ones posteriorly on each side of the tendon archiles and between their respective bones. Pressure upon the anterior swelling will increase the posterior swelling, which will prove to us that both belong to one capsule.

Now you may ask, we may have swelling produced by hydrops into the sheathes of the tendon, what then?

You can not mistake the one for the other, for in hydrops of the sheathes of the tendon, the swelling has an elongated form or shape. We should study therefore the length of the sheathes of the tendon, where they begin and where the yend, the relations of the tendon towards the bones, etc., all these isolated points are important to us to be able to make a correct diagnosis, we must understand them well.

My time is up; we will continue this subject when we meet again.

[TO BE CONTINUED.]

Proceedings of Medical Societies.

Article IX.

ST. LOUIS MEDICAL SOCIETY.

Taken by the Journal's Stenographic Reporter.

Saturday, April 28th, 1883.

Orbital Cyst.

Dr. Williams.—I have a case which I wish to present. It is the case of orbital cyst I had before the society several weeks ago. The next day after I had her here I opened the tumor and found a large cyst filled with pus; the mass of the tumor had evidently recently been in a state of acute inflammation which converted the contents into pus. The contents, amounting to about one and a half ounces, were discharged completely, and the cut has been kept open ever since. I found, on introducing my finger into the cavity, that it would not go to the apex, because there was not room enough; but the handle of the knife passed to the apex of the orbit without any trouble at all. There was a slight hypertrophy of the edge of the bones of the orbit in the neighborhood of the trochlea. The operation proved that the diagnosis that was made at the time I had her before the society was correct in every respect. The progress of the case proves the prognosis to have been correct, also. By introducing into the cut a lead tube about a quarter of an inch in diameter I kept the cyst open nicely, which also allows perfect drainage, and admits of washing and medicating the cavity, whilst it obviates the necessity of taking out a tent and reintroducing it, which is always painful. I prefer the lead pipe, or a pipe of some kind, to any kind of tent arrangement, because it is so much more easily managed. I syringe this cyst out through this tube and inject through it at the same time any kind of irritant; iodine, for instance, 25 or 30 drops at a time. I make her lie down, and place the head on one side so as to make the injection reach the bottom of the cavity and remain there until the alcohol evaporates. I allow the iodine proper to remain as long as it

will. The next day there is considerable secretion formed, which is always discolored by the iodine. Then, in a couple of days or so, the cavity ceases to suppurate, and until it is irritated again there is, I may say, no discharge whatsoever. The prognosis is entirely favorable if we can simply keep it open and medicate it until we destroy the sac. The cavity is gradually contracting, but the cyst wall is not yet destroyed. The tube in this cavity enables me to inspect the interior any time that I wish to by taking an ordinary reflector and throwing any kind of light into the cavity. The membrane lining it looks like mucous membrane more than anything else. I present the case simply to show the progress of the treatment, because you will remember at the time that I had the patient here, three weeks ago, the question of diagnosis came up, and there was some difference of opinion as to what sort of a tumor this was.

DR. POLLAK.—I would like to ask whether the patient can cause the eye to resume its proper position when the tube is taken out?

DR. WILLIAMS.—Not yet; the eye has not gone into its proper position, because the cavity has not yet contracted. The tube does not interfere with the eyeball going back into its place; it is the cyst that keeps it out.

DR. POLLLAK.—There is thickening of the cyst wall yet?

DR. WILLIAMS.—The cyst wall has not yet been destroyed; as soon as the contraction occurs, the eye will go back into place.

DR. POLLAK.—I did not understand how the cyst could contract if the same length tube is kept in all the time. I should be in favor of shortening it every day. I think the principle is correct that if a portion of the cyst is destroyed it will never refill. I think the doctor may, as he does, safely shorten the tube every day, and I expect in a short time it can be entirely dispensed with, and the eye will then probably assume its proper position.

DR. BERNAYS.—I differ very much with the gentlemen who think that the prognosis is a good one, and I propose to give my reasons for thinking as I do. I think my diagnosis has been beautifully confirmed by the progress of the case. In the first place cysts of the orbit are thin walled—very thin walled. They are never covered by mucous membrane on the inside. They

belong to the class called dermoid cysts. On the inside we find hair, etc., and all structures which are developed from the epithelium. The contents are generally oily, and also the crystallizable fat which is found in so-called wens upon the scalp and about the orbit. This cyst, I understand, contained thin, viscid mucus with pus, and it came out partly in pieces, as the doctor expressed it, rather in cheesy little lumps. All this tends to show that it is what I pronounced it to be, a myxomatous or gliomatous tumor which had broken down in the center, partly transformed into pus, partly into cheesy matter, partly into slime—general myxomatous matter. Now, if it had been a cyst, after opening and draining it in this way, the edges would not be found hard. The eyeball has receded but little into the orbit, in fact if it had been a simple cyst, a thin walled cyst, such as we are accustomed to find in the orbit, and this pus was removed, the eyeball would have popped back into its place. On the contrary, we find a thick, dense membraneous wall, which has yielded so little that the eye will not return, but is still a half an inch out of its line—out of the center line of the orbit. Now, besides that, the doctor says he found a roughness about the edge of the orbit near the lachrymal opening in the sphenoidal bone. I believe he said it was near where the trochlear muscle passes. This roughness of the bone there is slightly suspicious.

Dr. Williams.—The doctor misunderstood me. I did not say a roughness. I said there was slight hypertrophy of the bone in the region of the trochlea. There is no evidence of roughness except at the margin of the bone. There seems to be a little hypertrophy of the bone, that is all.

Dr. Bernays.—Well, the bone seems to be a little hypertrophied, and this necessarily depends upon a thickening caused by periosteal growth which, very likely, is malignant. We know that myxomata arise from connective tissue, a sheath of a nerve, or from a sheath of a blood vessel, as in the inguinal region, or they arise from the periosteum; that is to say from the fascia. If I had the case, I think the best thing to do would be to remove the ball, and scrape out the socket, perhaps chiseling away the bone of the orbit. I hope the doctor will consent to let us see the case for six or eight months, and then we can easily verify the prognosis, and determine who is correct in the diagnosis.

DR. DICKINSON.—As I said in my remarks made about this case when it was exhibited here before, I am not convinced Dr. Bernays is right. I think from her present condition, and from the history of the case as given by Dr. Williams, that my previous diagnosis was correct. I fail to see any indication of glioma that the gentleman spoke of. I remember distinctly the appearance of the tumor last summer, I think in July, and I do not observe any essential difference in the position of the globe to-day than it presented at that time, with this exception: there seems to have been an absorption of part of the growth at the edge of the orbit. I then regarded it as an osteoma, of which there are two kinds, namely, the ivory and spongy. This, from its history, and from the phenomena it presented at that time, confirmed that diagnosis. It does not now seem so prominent as it was at that time. Setting aside these elements of diagnosis I ask, what is the occasion of the deviation downward and outward, in addition to its protrusion. The motions of the eye are complete in all directions except the action of the oblique muscles; the recti muscles are correct in their action and unresistant. Not only does this growth affect the margin of the frontal bone, but it must extend far back toward the apex of the orbit, or else, as has been stated, the eyeball would have returned much nearer to its normal position than it is now. In addition to this in osteoma there is a thickening of the cyst in apposition to the globe itself, and after lying in apposition with the roof of the orbit, would temporarily prevent its return to its normal position; and as the cyst closes it will return to some extent, but not entirely. A very familiar site for degenerations of this kind is upon the bones of the head, the frontal bone, particularly; the bones of the cheek and the bones of the scalp. The history of the case is, that the tumor originated on the frontal bone, two years ago, when she gradually observed that there was a displacement of the globe until it had attained its maximum, when I first saw it last summer. It is, to my mind, a very undesirable case. I still call it an osteoma, the bony tumor extending entirely over the orbital plate.

DR. WILLIAMS.—It can not be seen when looking into the cavity. It is perfectly smooth and nice.

DR. DICKINSON.—The patient is not yet out of danger; if anything it is more dangerous at this site than any other part of

the orbit, simply because usually there is a degeneration of osteotic matter upon the superior and upper sides of its roof, or within the cranium, and therefore its removal would not accomplish the object desired, as we may have another one within the cavity of the skull.

Dr. Post—I would like to ask Dr. Williams to explain a little more fully about the interference which there was to his making the exploration with the finger. I understood him to say he was able, by turning the knife, to reach the apex of the orbit, but was not able to do so with his finger; why was that the case?

Dr. Williams.—There was not room enough between the straight muscles and the inner wall of the orbit.

Dr. Pollak.—I think this is simply a case of hyperostosis. It is not a growth, it is merely a hypertrophy of the bony tissue that will probably be absorbed in the course of time. I have no idea that there is anything malignant about it. The patient has been troubled with it for two years. I think the result tends to support my diagnosis. The woman is now without pain, and aside from the little deformity she has done well. However, we will be able to see in a year from now whether Dr. Bernays is correct or not.

Syphilitic Ulcer of Pharynx.

Dr. Mulhall.—I will present the particulars of a case that elicited some interesting facts. A male patient, aged abeut 40, came to me at the St. Louis College Dispensary some two months ago, with an ulcer in the lateral wall of the pharynx, which, from its history and appearance, proved to be syphilitic. I at one administered the usual remedy, iodide of potassium, giving him, I believe, ten grains three times a day. He came back on the third day and said something had occurred that never had happened before; that was spitting of blood. I did not pay very much attention to the remark, as I thought it was very likely from the surface of the ulcer. He came back in ten days and the ulcer was healed entirely, but he said he continued to spit blood every morning and evening, and it struck me that possibly this might be due to some effect of the iodide of potassium. I advised him to stop using the remedy for a week, and there was a cessation of the spitting of blood immediately. I

then administered it again, and in three days he began to spit blood again. I kept up the iodide for four or five days, and again asked him to cease for a week, when the hæmoptysis ceased. I repeated this a third time in order to assure myself of the result, and again the hæmoptysis followed the administration of the remedy in the usual case. The subject of the toxic effect of iodide of potassium is a very interesting one, and certainly hæmorrhages in consequence of it are not uncommon; the most common is, perhaps, purpura hæmorrhagica, which only occurs below the knees. I have, myself, seen very serious consequences as a result of the administration of the iodide of potassium in the shape of troublesome skin diseases, not in my own practice, but in that of a distinguished dermatologist, who proved that the effects were due to the administration of this remedy. I saw also a rather celebrated case of œdema of the glottis, necessitating tracheotomy, which resulted from the administration of iodide of potassium. The case is reported by Mr. Jonathan Hutchinson in the *Medical Times and Gazette*, I believe for 1875. The man was brought into the London Hospital, suffering from laryngeal rigor, and the house surgeon at once opened the trachea and saved the man's life. The man was taken up stairs, and it was observed that there was an eruption on the forearms, face and hands. One of the assistant physicians was sent for; he came and diagnosed a case of small pox, because the vesicles were umbilicated, and he said the affection of the larynx was most likely due to irritation causing œdema, and advised isolation. I remember that Mr. Hutchinson and Dr. Henry Sutton were then called in, and both pronounced it a case of iodide poisoning. He had been under the care of a practitioner in the neighborhood, and when he was asked what the patient had been taking he said the man had been suffering from chronic rheumatism, and that he had administered iodide of potassium. The bottle of medicine was gotten and it proved to be iodide of potassium. This man was able to talk in forty-eight hours, and he then said that four years before he had had similar symptoms from taking iodide of potassium. I mention this case of hæmoptysis that occurred under my care, because I wish to place it on record. It is the first one I know of in which the hæmorrhage has been from a mucous membrane.

DR. WILLIAMS.—I would like to ask the doctor what he con-

siders a poisonous dose of iodide of potash; how much must a man take in order to be poisoned?

Dr. Mulhall.—Of course there are idiosyncracies, and what would poison one man would not poison another. I was thinking of writing a paper on the subject at one time, and Dr. Hodgen told me he had a patient at the City Hospital who took two ounces every day, with the effect of curing his syphilitic disease. I think the great majority of cases where toxic effects are produced are where small doses are administered, three, four five grains three times a day. We can never tell how much a patient can bear, or what quantity will produce a toxic effect. The only safe way is to begin with a small dose and gradually increase the quantity.

Dr. Watkins.—I believe that if I were to take twenty grains of iodide of potash that it would kill me. Dr. Dumesnil suggested to me that for a troublesome sick headache I ought to take two grains of iodide of potassium in a glassful of water two times a day. Acting on the suggestion I began to take it, and two grains of iodide of potassium gave me a catarrh and a stiffness in my cervical muscles so that I could scarcely turn my head.

Diphtheria.

Dr. Love.—Some time ago the subject of diphtheria was before this society, and I related the history of three or four cases which demonstrated to me the fact that those cases were dependent upon bad drainage and sewer gas, and I took the position at the time that there was far more in preventing diphtheria by purifying the atmosphere of the house, and having proper drainage, than there was in the treatment of it. Some one, at the time, suggested that that was a theory; that sewer gas was beginning to be charged with everything; that it was a myth, and so forth; and it was suggested that in the country diphtheria was often found in its most malignant form, even in districts where sewer gas was never known. That, I did not doubt, was true, and in a few weeks this subject came up to me again. I was called, some few miles out from the city, to see a couple of cases of diphtheria in the same family, and they were very malignant; the patients were almost dying when I saw them, and the remark that was made that night came up to my mind, in regard to sewer gas. I then began to direct my attention to the surround-

ings, and although I could not find any sewer gas, I found, on investigating the yard, etc., that the privy was within ten feet of the water supply, and so close to the well that, to my mind, it explained the cause of diphtheria; it was the insanitary condition of the place that developed the same effect as sewer gas. The poison was taken into the stomach with the water rather than through the lungs, as in the poisoning with sewer gas; and I believe that many of these cases in the country are caused by this same insanitary condition of premises, the organic poison entering the system by means of drinking water. In the city our water supply may be good, the food we eat may be good, but the air we breath is not, and this organic poison enters our bodies through this channel. Some years ago—in 1873—gentlemen who were at the City Hospital at the time will recollect, that an epidemic of cholera occurred in that neighborhood, and I believe that every case outside the hospital was found to be in persons who used well water; and that the wells from which water was taken were very near the privies; a good many cases were very close to the milk dairies, which were found to be in a very filthy condition. The only time that the city at large has had an epidemic of cholera since 1849, was in 1866; that was the last time, and that was before the city had any well developed sewer system, or before it had a perfect one, at least; there were large ponds filled with stagnant water all over the city. We have had no general epidemic of cholera since we have had proper drainage in the city. But the point I wish to make is, that while there may not be any sewer gas in the country, there are insanitary conditions causing the same results. It was argued, when I spoke on this subject before, that as there was no sewer gas in the country, therefore diphtheria was not caused by sewer gas.

DR. DUDLEY.—How do you account for the development of cholera from the use of this water, in 1873, and the production of diphtheria from it in 1883.

DR. LOVE.—These diseases are probably dependent upon specific causes which would pass off without producing any effect, were it not for the fact that local insanitary conditions constitute an aggravating cause, and actively assist in developing the diseases.

DR. JOHNSTON.—The student who has given his attention to

the subject of cholera will remember that it starts at Singapore, and follows the disciples of Budda; it starts in Central Asia, always, without a solitary exception; say about 1830, or 1832, it arrived at Mecca, following the worshipers of Mohammed; from Mecca it was taken to Central Africa, also to the coast of Singapore and Madras; from Mecca it was taken, by the pilgrims, to Constantinople, and there, coming in contact with the commerce of Western Europe, it was brought to Western Europe, and from there was taken to Central Europe, and from there transported to North America, following the line of trade. The first cholera we had was in Canada, in 1832; the next summer it reached Virginia. Cholera always follows the course of trade. We have not had any cholera here since 1867. We may meet with cases of disease that have the symptoms of cholera, but it is not cholera. Dr. Love says there was an epidemic of cholera in 1873, but it was not an epidemic of cholera that killed people.

Dr. Love.—If the doctor will look over the records he will find that I am right, and that there was cholera in St. Louis in 1873.

Dr. Schenck.—I think we need not go very far in order to settle the matter as to the presence of cholera in the city in 1873; if my recollection serves me right I relieved Dr. Dudley, as health officer, and his report will show that there was cholera here at that time; he was health officer at the time, I think. There is one point in reference to what Dr. Love said regarding diphtheria: We are constantly building sewers, and in so doing closing up the sub-surface drainage, and there would have been nothing to save us except that nature has given us, at the same time, limestone strata to act as means of soil drainage. There is an important point in connection with diphtheria, which may be found in one of the reports of the New York Board of Health. When diphtheria prevailed to such a fearful extent in New York City, one of the sanitary inspectors was told to go out and carefully locate the line in which it was prevailing. He did so, and returning, after some search, an old map was found, which corresponded exactly with the sketch which had been prepared of the line of diphtheria; and this map proved to be that of the old water courses of the city.

SATURDAY, May 5, 1883.

Tracheotomy Tube

DR. HENDRIX.—read a paper on the Tracheotomy tube, its gradual withdrawal, and the report of a case in which it was used. DR. PORTER.—The idea, and the practical carying out of the idea which Dr. Hendrix has explained to us is most praiseworthy. It is not in every case of tracheotomy by any means that there is any trouble in withdrawing the tracheotomy tube, but sometimes such trouble occurs, and it is well worth while to bear Dr. Hendrix idea in mind in such cases, when they do occur. There are two theories as to the difficulties in the withdrawal of the tube. The one which the doctor has advanced is probably the most reasonable; but there is still another difficulty which I have seen, and that is, sometimes after a severe inflammation of the larynx and trachea there is paralysis of the abductor muscles of the cords, and the cords, as you are aware, not being cords but mere valves, the cords remain in the median line or near the median line, and a paralysis of this kind differs a great deal from complete paralysis induced by pressure upon nerve trunks where there is an aneurism or double goitre, the whole body of the nerve is there involved the filaments going to the abducter and addactor muscles. The vocal cords remain in what is called the cadaveric position half way between the median line and the side of the larynx. But the paralysis of the abductor muscles alone may occur from any thoracic inflammation, inflammation within the larynx, and if it had not been for the doctor's very ingenious solution of the difficulty, which I still believe to be the correct one, I would be inclined to think there was for a long time a paralysis of the abductor muscles, that the vocal cords remained in the median line, and all the more so because there was some inability to speak, for a time entire inability to speak. With the paralysis of the abductors there is very often paralysis of the tensors, which throws the cords out of the median line, and causes them to be very much relaxed and the shutting off of the air is almost complete. where there is this paralysis in the beginning tracheotomy is nearly always necessary. In very many cases the tube is not necessary at all. I do not believe the practice is followed in this state,

but in the east, there is now an operation without a tube, and those who have practiced it speak highly of it. This must be remembered; the tube must fit the larynx easily so as not to produce irritation and hyperæsthesia and it should be withdrawn as soon as possible. The tube should be made so that this inner tube can be removed and the patient be able to breathe through the outer tube. I am in the habit of using the Durham tube which allows the inner tube to enter readily; in this tube I have made the addition of an opening near the top of the outer tube so that the patient may be able to withdraw the inner tube and leave the outer tube in the trachea as long as necessary. To this there is the objection that the fenestra often produces granulations. The performance of tracheotomy is generally a simple operation, but the treatment afterwards in some cases is very complex.

Dr. Prewitt.—There is still another difficulty that I have met with in the use of the tube. On the 25 th. of January, 1881, I found a man in the wards at St. John's hospital suffocating from a trouble in the larynx and trachea, and with the consent of Dr. Steer, who had charge of the ward, I operated on the case. After I had opened the windpipe I introduced the tube, or rather the man ceased to breathe before I got the wind pipe open, and was almost in a state of asphyxia, and would have been dead in a little time if it hadn't been for the operation, so that when I had cut into the windpipe he had ceased to breathe. I introduced the tube as soon as possible and instituted artificial respiration, and he eventually began to breathe again, but very badly. It occurred to me that there was something wrong about his breathing; that possibly I had not introduced the tube very satisfactorily and I ventured to remove it. I put my finger in the opening into the trachea, the man struggled a little and threw up a cast of the trachea extending to the bifurcation.

Dr. Pollak.—Through the opening.?

Dr. Prewitt.—Through the opening. He then gradually revived and got along after a few hours without much trouble, but I have never been able to remove the tube. There also seemed to be a great deal of inflammation about the larynx above, and it really seemed as though the false membrane that had been about the larynx had remained there becoming organ

ized. That is the way it looked to me whatever the cause of it. Whenever I attempted to remove the tube, the opening above seemed to be filled with the same spongy granulation tissue; we have never been able to remove the tube and he still wears it. Some time ago I concluded that I would attempt to open the larynx in some way from above. I found that the man had bee in the habit of leaving the inner tube out and going with only the outer tube; the fenestrum of this tube had been stopped up with granulations, which looked like a dark oval shaped patch, then there was simply an inclined plane from the upper extremity down to the trachea following the line of the curve of the tube, but seemingly no opening in the larynx whatever, at least none perceptible; it looked like simply a smooth inclined plane continuous with the posterior wall of the trachea, and yet it was evident that there was an opening of some sort because on putting the finger on the tube the man could speak in a whisper. With some difficulty I succeded in passing a probe up and a small catheter, and there seemed to be a sort of tissue that extended down like wings as it were over the opening from above, with a small opening beneath, a well formed mass of material.

I got a portion of it out. Since I have passed a number fifteen English steel sound through this opening, thus dilating the opening as much as possible, and he talks better, but he cannot do without the tube. He will not wear an inner tube, and gives as his reason that he is frequently called upon to respond to questions and it is troublesome. Here is evidently more or less new tissue formed in some way, granulations have become organized and thus plugs up the opening. I don't know how to get rid of it. I tried by dilation and cutting off portions of it, hoping I would succeed in reestablishing the tract but I have not succeeded so far. If I could introduce a tube and leave it permanently I might possibly secure an opening, in fact, if I could secure an opening for a time so that the air could pass in and out, I think that would have a great deal to do in maintaining the full caliber of the outlet. If I could insert something from below that would keep the trachea open the mere presence of the air there would do a great deal towards restoring the caliber of the larynx itself.

DR. MULHALL.—What was the history of the case before tracheotomy.?

Dr. Prewitt.—He had had typhoid fever and had had very recently pleuropneumonia. He had been spitting up more or less bloody sputa etc. for a few days before I saw him. I was accidentally passing through the ward on Chrismas day, when I found the man breathing with great difficulty. The sterno cleido mastoid muscles stretched like bow strings with every inspiration, and his condition one of imminent suffocation.

The Sphygmograph in Incipient Aneurism.

Dr. Porter.—Within the past few months I have been interested in three cases of incipient aneurism; aneurism without very definite direct symptoms, where in the early formation of an opinion with regard to the cases I was considerably aided by the use ofthe sphygmograph. While neither the instrument nor its application is a novelty to the members of this society, it may form the basis for some discussion, and I think I can in a few minutes show wherein the instrument was of use to me in the cases mentioned. These patients were sent to me primarily on account of laryngeal complication. The gentlemen all know that in certain cases of thoracic aneurism there is an involvement of the larynx on account of pressure upon the recurrent nerve, and this involvement to some extent is limited to the side affected. For instance aneurism of the transverse arch of the aora may produce pressure upon the left recurrent nerve; aneurism of the ascending arch may produce pressure upon the right recurrent nerve, and the evidence will be in the larynx; I may say in all these cases there was this evidence; so that the tracing of the sphygmograph aided me, in deciding my opinion, it tended to corroborate the evidence I found in the larynx. The gentlemen will remember that the arch of the aorta is as illustrated by this diagram. The direct movement of the sphygmograph needle if normal will be some such line as this illustrating The first given is the impulse given directly by the heart and sent through the artery, the second being due to the recoil or elasticity of the arterial wall. Now if we dilate the blood channel there is a diminution of the contractility of the artery and there will be a diminution of the second stroke. For instance, one of these cases of aneurism was evidently of the ascending arch, for reasons that I need not now go into, of the anterior portion of the ascending arch, probably, and therefore in place of the well marked sphygmograph tracing, there was some

such movement as that; (Indicating by drawing), In what manner did the sphymograph aid in locating the aneurism? In this way; being a lesion of the ascending arch there was this same abnormal movement at each wrist because there was the same conduction of the abnormal stroke throughout the whole of the circulation. There was in this case as in all cases, some little modification, the right artery not being quite so well marked as the left in the abnormal condition. The second case as well as the third was evidently an aneurism of the tranverse, and as it proved afterwards beyond a doubt, an aneurism of the transverse and descending arch; at least an aneurism which did not involve the aorta before the innominate artery had left it. So there was this condition; on the right side there was a correct and normal sphygmographic tracing, and that on the left side was something of this nature (illustrating) there was the reduced and abnormal tracing. The differentiation and regulation of these symptoms to the locality of the trouble is very interesting. I suppose Mahomed has done more to reduce this to an absolute science than any one else. Years ago I saw him working earnestly and diligently and seemingly without any great amount of success. The sphymograph that he used at that time had a long arm and required many hours sometimes to get a satisfactory tracing from a patient, now with the more improved instrument a tracing can be taken in a few minutes. I may say that the diagnosis in one of these cases was proved by the sudden rupture of the transverse arch, and upon postmorten examination was further verified; however, long before the man died there was no doubt as to the condition. The only evidence was the paralysis of the left recurrent nerve and the sphymograph tracing when I first saw the case. The second case was that of a late officer well known. In this case there was nothing upon which to base the diagnosis except the paralysis of the right recurrent nerve and the condition existing which gave rise to the tracing which I have tried to illustrate. The third case has not yet been proven. The patient was a gentleman from a neighboring state sent to me on account of the laryngeal condition, and when the opinion was given of incipient aneurism he went home. In this case I am confident the result will be as in the other two. Dr. Prewitt asks if in the case in which rupture occurred a bruit could be heard. When I first saw the patient there was no bruit; the only indications were given by the abnormal condition of the

larynx and the sphygmographic tracing. But of course before his death the condition was very apparent.

Dr. Pollak.—The aneurismal bruit is always heard is it not.?

Dr. Porter.—No, sir, I have found in some cases there will be no bruit; although there are other evidence of aneurism, and later the bruit will be heard. It nearly always occurs sooner or later.

Dr. Pollak.—Aneurism of such a large vessel and no murmur.?

Dr. Porter.—It is not always possible even in a large aneurism to fully determine the bruit, there may be in the beginning symptoms of aneurism, symptoms of pressure upon the recurrent laryngeal nerves without any bruit. I do not know what per. cent. I think 15 per cent. of the cases, so far as my reading has extended, occur without noticable bruit in the incipiency.

Dr. Dudley.—Was the nerve paralyzed at the time you made the diagnosis.?

Dr. Porter.—Yes, sir, partly.

Dr. Mulhall.—I am not able to say much about the value of the sphygmograph in the diagnosis of thoracic aneurism. I must confess that I was not aware that it was of much value. I thought the sphygmograph was a sort of scientific plaything rather than one of any diagnostic value. I was present when the sphygmograph was very faithfully used in the hospital at which I was a student and I know that the gentlemen who were using it came to the conclusion that they could make a diagnosis without it about as well as they could with it; in other words, the aid to diagnosis was very little. With regard to thoracic aneurism I know I have examined the larynx of every case of thoracic aneurism that I have ever met, and I suppose I have examined between 30 and 40 at least, and I have never yet seen paralysis on the right side of the larynx result from thoracic aneurism. It might occur, but I have never yet seen it so; the percentage of cases of paralysis of the right recurrent must be very small; at least it has been so in my experience. It is an interesting fact that it is always the abductor fibres of the recurrent laryngeal that are paralyzed: in other words the cord is seldom found in the cadaveric position. Of course if it were it would indicate paralysis of both abductor and adductor fibres.

Why this is so I am not able to say, except that the abductor muscles of all portions of the body are liable to be paralyzed before the adductor muscles and it follows the rule in the larynx also.

DR. PORTER.—Mr. President, of late there has been a great deal of refinement in the study of the subject of paralysis of the recurrent nerve due to pressure upon it, and while the doctor is partly correct he is not entirely so. It is true that we find that one set of filaments, the filaments going to one set of muscles, are more readily paralyzed than those that we find going to another, the filaments going to one set of muscles of the larynx will more generally be paralyzed; in the early stages, they are the first to be paralyzed, but continued and increased pressure will paralyze or effect both the abductor and adductor filaments. This is very strange but it is persistently insisted upon by the best authorities. It was a subject of no little interest to me to find this was verified by my own observation, because at that time I did not know that such a record had been made. Repeated, persistent and forcible prassure upon the recurrent nerve will paralyze both sets of fibres the abductor and adductor and leave the cord in the cadaveric position, the position found in post mortem. I know that the sphygmograph has been though by many to be a scientific plaything just as years ago the laryngoscope was, just as the microscope was considered a scientific plaything; just as the thermometer was regarded as of no real value; we all know that these instruments are of value now. We know that the microscope was before the world ten years before it went into any great amount of practical use. So it was with the laryngoscope, and only five years before the laryngoscope was invented the statement was made by one who was not accustomed to look ahead, that probably no man living would ever see the vocal cords in a living subject; five years after that they were readily seen, and yet it took ten years to come into anything like general use by the profession. So it is with the sphygmograph. The persistent use and study of the microscope, laryngoscope and thermometer has shown the value of all these methods, and so I think it will be with the sphygmograph.

DR. PREWITT.—I don't want to speak of the sphygmograph, because we don't know what the possibilities of the future are. It is true I don't think it has accomplished much so far, but it

might accomplish more in the future, in fact since the invention of the telegraph I am willing to admit almost anything is possible. But I don't exactly understand how an aneurism that would produce such an alteration in the sphygmographic tracing would not either have caused an interrupted pulse, or dullness on percussion that would have indicated the existence of aneurism. I will say that a few years ago I saw a case of pressure upon the right recurrent laryngeal nerve producing paralysis of the vocal cords. As Dr. Mulhall very well stated it is exceedingly rare, so rare that very few have met it. This was a case of aneurism of the arch of the aorta involving the arteria innominata and the nerve was wrapped around and stretched over it. There was quite a large aneurismal tumor.

Dr. Mulhall.—I don't want to be placed on record as having intended to convey the impression that I didn't think that pressure upon the resurrent nerve could produce complete paralysis of the nerve. Of course if pressure be long enough and hard enough paralysis of both the abductor and adductor filaments would follow and we find the vocal cord midway between abduction and adduction, the death attitude but I think it is always the history of these cases that the abductor filaments of the recurrent laryngeal nerves are the ones first paralyzed, why-or wherefore I can not say and we find the cord adducted, its phonatory attitude. I can only say that the abductor muscles in the other parts of the body are paralyzed in preference to the adductor muscles. The sphygmograph and laryngoscope can only give presumptive evidence that there exists an intrathoracic tumor, whose nature it needs much stronger evidence to determine accurately.

Peculiar effect of Atropine.

Dr. Williams.—Mr. President, if there is nothing else before the society I will mention a case which I had recently, and in which I had a very singular experience in the use of atropine locally in the eyes. Some weeks ago I operated upon a little boy twelve years of age for strabismus. After he got well it was found that he needed glasses, but on examination I couldn't determine what kind of glasses he needed. My conclusion was that there was spasmodic action of the focusing power and I consequently used atropine in his eyes to relax the focusing power so as to examine him for glasses. I was very much surprised to

find that after two or three applications of a four grain solution of atropine to the eyes the boy became perfectly crazy. He was as crazy as a boy could be; I gave the patient the medicine and told him to use it two or three times during the afternoon. The next morning the boy was crazy and remained so all day Sunday, it was Saterday that I gave him the medicine, all day Sunday he was crazy and the fore part of Monday. However, on Monday morning the parents became alarmed in regard to his condition and quit useing the medicine and by Monday afternoon he was quite well out of this condition, and on Tuesday morning was entirely out of it. On Sunday the boy left home and went roaming around the city and imagined that two or three dozen of his friends were with him; he would talk to them on the street; would call them by name. He lived in the northern part of the city and he came into the city and down to my office and said his father had sent him in for another application of the medicine, he acted strangely but I did not suspect anything at all, and used the medicine, again telling him to go home. A little later his father came in, asking if I had seen him and I told him he had just left the house.? He said he had been absent from home all day running about over the city not knowing what he was doing, the father became very anxious and requested the police to find him if they could. On Sunday morning the first strange thing that the parents noticed was that the boy left the house and went into the wood shed and picked up a stick of wood and told his father that it was the pretiest dog he ever saw in his life, and took this stick of wood into the house and nursed it for some hours, playing with it, feeding it and calling it the prettiest little dog he ever saw. He was absolutely crazy and it was the result of the local use of atropine in his eyes. This is the first case of this kind that I ever met with or heard of. When I was in Germnay attending the clinic at Professor Arlt in Vienna, I remember a cataract case in an old lady upon whom he had operated for cataract, and afterwards used atropine as we always do in those cases. She became entirely crazy, became absolutely unmanageable and was boisterous, noisy and wouldn't listen to anything; wouldn't listen to persuasion, wouldn't listen to scolding, and even force would not control her unless it was absolute force. I remember that the patient annoyed the professor exceedingly, and he concluded that the lady was home sick she having come from the country and sent for some of her people

to take her home. She remained crazy several days, and then gradually came out of it. Since then I remember two or three cases in Cincinnati, where we had operated for cataract and of course used atropine, the cases became similarly affected. I remember that in one case we thought that it was pure cussedness in the patient, a desire to give trouble and be annoying. Since I have been in this city I have had two cataract cases where the patients became crazy after the operations and after the local use of atropine in the eyes and I have now come to the conclusion since the experience I had with the little boy that the cause of the trouble in these cases was the local use of the atropine in the eyes. The case of this little boy which I have memtioned is the first case of the kind that I have met with or ever heard of, where two or three applications of atropine to the eyes made the patient crazy. I have no explanation whatever to make of the truly anomalous and very strange effect. I don't know in what way the atropine produced this effect, I simple know the fact.

Dr. Meisenbach.—I would like to ask if there was any rash present during the time of these symptoms.?

Dr. Williams.—No perceptible rash. There was no redness of the skin.

Dr. Stevens.—Mr. President, this is such an extraordinary case that it surprises me. I don't believe there is any similar case on record in our books. I may be mistaken, however, but I don't think there is such a case reported from the use of atropine. I cannot conceive it possible, and must conclude that these were merely coincidences, and that the insanity was produced from some other cause. I cannot conceive how the local use of atropine in the eye could have such an effect upon the brain and nervous system; and still it would seem as though there may be something in it if it is true, so many cases are on record, but I don't remember seeing anything of the kind in all my reading. It may be different with Dr. Hughes observation.

Dr. Watkins.—I am inclined to think it is a peculiar susceptibility to the drug. I had an experience not so extensive as that related by Dr. Williams; it was a case in which I found it necessary to use belladonna, and I had a suppository prepared, containing two grains of the extract of belladonna, which was used by a lady, a very large woman weighing 160 odd pounds,

she used one of them and it set her crazy. I wouldn't have believed it would have had such an effect. I think it is probably owing to some peculiar susceptibility.

DR. WILLIAMS.—I would like to ask the Doctor if this lady was crazy?

DR. WATKINS.—Yes, sir; so much so that company had to be retained in the room until the influence of the medicine wore off. She had very peculiar vision, saw strange sights; she had no rash, but all the other symptoms of belladonna poisoning were present.

DR. MEISENBACH.—The reason I asked Dr. Williams the question, whether there was any rash, was because from the history of the case there was no doubt of the toxical effect of the drug, and it most always occurs where the action of the belladonna is toxical that the rash also occurs. I once administered 1-120 of a grain of atropine to an infant aged eleven months, and in two hours the pupil was fully dilated, there was profuse rash—the rash cannot be distinguished from that of scarlatina—and the child had all the symptoms of the toxic effect of belladonna. It passed off again in a few hours. All the cases of toxic effect of this drug, I believe, has been accompanied with this rash. I recollect several cases of poisoning that took place while I was at the city hospital and they were all accompanied with this rash.

DR. HUGHES.—Mr. Chairman, I was not in the hall when Dr. Williams introduced his case and I didn't learn whether the patient had all the characteristic symptoms of belladonna poisoning, the conditions of dilatation of the pupils, eruption, etc.; what was the condition, Doctor, was there any dryness of the throat—the fauces?

DR. WILLIAMS.—There were none of these symptoms present. There was no redness of the skin; no marked dryness of the throat; the boy didn't complain of that, he had really no mind at all; but so far as the poisonous effects were concerned there was no evidence of that in any of the cases I mentioned.

DR. HUGHES.—I want to inquire whether he had a family history in regard to the existence of tendency to delirium under the use of narcotics generally; whether there is any hereditary history of insanity—to the neuropathic diathesis?

DR. WILLIAMS.—Nothing that I know of, Mr. President; the

father told me there was nothing of the kind, that is my recollection—nothing of that kind in the family anywhere.

Dr. Hughes.—The question I asked, Mr. Chairman, will constitute the basis of what I have to say on this subject and that is this: that in a certain proportion of persons there exists a peculiar nervous diathetic condition which predisposes to untoward mental action on the part of the patient, on the administration of narcotics generally. The existence of an unstable nervous organism, a latent neuropathic diathesis is often revealed in this way. For instance, it is not customary for the alcoholic poison in its influence upon the cerebrum to produce violent maniacal demonstrations. The usual effect of stimulation is primarily an exaltation of physiological functions, followed by depression, not usually accompanied with delirium or maniacal excitation, and one of the best evidences of the neuropathic diathesis in an individual is to find him crazy drunk, under the influence of a limited quantity of alcoholic stimulation, such an amount of alcoholic stimulation as an ordinary man would take with impunity or with the result of causing only the customary exaltation, and its recurring depression and tendency to sleep. When we encounter an individual who under such circumstances becomes what we call crazy drunk, if we search into the ancestral history of the individal, we will find underlying this, something more than the ordinary mental peculiarity of mankind in general. It is familiar to every practitioner that morphia will act on the cerebrum in certain individuals different from what it does in others. As an individual becomes experienced in the practice of his profession, he learns to inquire of new patients or of the friends of new patients, whether they have this peculiarity which subverts or perverts the ordinary action of an opiate; because in his experience he has found the necessity of the ordinary hypnotic dose of morphia to enable his patient to sleep; and when he encounters certain patients who possess this nervous diathesis, instead of going to sleep with the usual narcotic dose, it makes them wider awake and produces a condition directly opposite to that which is designed by the prescriber and so it is in regard to belladonna; so it is in regard to chloral hydrate and it is one of the objections to to the smallest doses which are sometimes given, that in these individuals that it produces a stage of excitation which is never passed beyond into one of repose, and rest never

follows in these individuals a minimum dose. It is true in regard to every other narcotic and hypnotic agent with which we are familiar; bromide of potassium, however, less than all, produces this excitation; But there are individuals who can be mentally excited under the influence of minimum doses of bromide of potassium instead of being tranquilized through its agency. It is just as true of belladonna as it is true of these other agencies. I have not infrequently seen these delirious effects. It is, however, quite an uncommon result to find what might be called a maniacal fury resulting from the administration of the ordinary dose of opium or chloral hydrate or belladonna.

DR. STEVENS.—In this case you understand, it was merely a local application to the eyes.

DR. HUGHES.—I understand that. There is another point in regard to this matter. I didn't learn whether the patient remained long insane.

DR. WILLIAMS.—Until the medicine was stopped. It then soon disappeared.

DR. HUGHES.—Now this is one of the things, one of the practical things for medical men to consider in the administration of all narcotic agencies, whether they be given by the mouth, hypodermically or administered in that way in the eye, and it is an inquiry which might save a physician a great deal of discomforture, especially with new patients, to ascertain whether the patient upon whom he was about to use these narcotics, belongs to a family in which there is nervous instability—cerebral instability—a family in which there exists this peculiar impressibility to the action of narcotics, by which a minimum dose is likely to produce perverse action rather than the salutory one looked for therapeutically.

DR. HURT.—It seems to me, Mr. President, in this case one might very reasonably undertake to account for the dilirium without assuming that it was due to the specific action of the atropine upon the nervous system. This patient had labored under a defect of vision, and possibly the consequence of his efforts to avail himself of the use of his visual argans brought about a condition of irritability or may be hyperæmia of the brain, and under the use of atropine a flood of light was thrown upon the visiual organs sufficient to increase greatly the hyper-

æmic condition of his brain. There was no longer power in the pupils to control the amount of light thrown upon the optic nerve and through that upon the brain creating an amount of excitation or excitement in the circulation that would have changed the state of the brain to a great extent, and again this might have been assisted by the specific action of the drug upon the heart to the extent that it had any constitutional effect for the reason as we know atropine is a vascular stimulant. Now if the susceptibilities to this drug had been very great in this patient, possibly the small quantity that had been absorbed through the conjunctiva may have effected the heart to some extent. We know how small a quantity of atropine is sufficient under ordinary circumstances, to effect the heart action.

Dr. Williams.—Dr. Hughes seems to think that this matter was mere excitement. It was an absolute loss of mind. This boy had no mind at all. I am familiar with the poisonous effects of atropine. In this case the boy lost his mind entirely. I have seen persons get as red as blood in the face and be actually poisoned by the drug and still retain their mental faculties fairly well. The peculiarity in this case was the loss of mind; the boy had no mind at all. I omitted to say that the boy was wakeful and could not sleep at night.

Saturday Evening, May 12, 1883.

General Melanosis.

Dr. James.—I have brought some microscopic slides of sections of nodules from a case of general melanosis which occured in Ohio some months ago, in the practice of Dr. Falls. I received some time ago a bottle of urine for examination, which was of such a remarkable character that I wrote to the physician to send me something of the history of the case, and in return I was sent a printed slip which was cut from one of the daily journals describing a case of general melanosis, and was entitled: "A White Man Turning Black." The physician having the case in charge, wrote me several letters, the first one dated July 11th, the second July 25th; another Sept. 22d, in which he says: [*the Doctor here read letter*].

I have some photographs here which were sent to me. I have

some of the nodules with me; they are like a piece of coal—just as black as they can be. The sections I have here are, one from the brain and one from the liver. These nodules were in alcohol and I suppose it was changed a dozen times and each time it became a very dark red; by reflected light it is a very dark red color. I have some crystalized hematoides also.

DR. FAIRBROTHER.—I am interested in this subject and hope it will receive attention; if there is not time enough to-night, there may be time enough at our next meeting. It is one of the wonders of pathology. There is an idea connected with the subject of the transformation of all the secretions of the body into this black color which might be considered a little parallel to certain chemical combinations. You know that black is not one of the primary colors. It is not, strictly speaking, a color. it is the absence of color—not a color to be created, but a color which partakes of the presence of certain other colors, just as certain chemical reactions take place in the presence of certain chemical reagents. We know how primary *chemicals* are compounded to produce secondary substances; how oxygen and hydrogen combine to make water; we know that substances are so combined, two primary making a secondary, and the *secondary* with one or two more, making a tertiary altogether different from the other; and so it seems to me, in the human body we have a somewhat similar state of things; we have chemical actions and they often take a morbid form in which we have pathological secretions which are a little to be compared to the pathological secretion, as we call it, of melanosis. We have a physiological secretion of pigment—a black substance in the cuticle; in the hair bulbs chiefly, not anywhere else in the body, and it is altogether wonderful that this secretion should take place in other parts of the body, affecting the urine, affecting the fæcal discharges, affecting every organ and every part of the entire body.

SATURDAY, MAY 19, 1883.

Strangulated Hernia.

DR. BERNAYS.—I wish to present specimens from two cases of strangulated hernia. In both of them the omentum was the part strangulated, and both cases are remarkable from the fact that I was compelled to extirpate the sac. One was done this morning

and the other two weeks ago. The one that I operated on first, recovered entirely. It will be observed in the specimens that pieces of the omentum were removed from the hernial sac.

A Case of Glanders.

Dr. Wesseler.—I wish to report a case. A man was admitted to the Alexian Brothers Hospital last Monday at 11 o'clock, who said he had been treated for acute rheumatism, but I thought there was a mistake either in the diagnosis or in the treatment. The man was not suffering from acute rheumatism. It seemed to me to be more like a case of typhoid fever. He was unable to give much of a history of himself and he was allowed to remain quietly in bed. On Tuesday there were some small vesicles to be seen on the face; on Wednesday I didn't see him; on Thursday the vesicles were larger and were beginning to break; on the forehead there was one as large as a half dollar, and it then occurred to me that this was a case of glanders. I sent up to the City Hall and Dr. Carson came down, and Dr. Luedeking also saw the case; a number of young graduates also saw it and they agreed that the disease was glanders according to the books. I did not feel certain about the case, having never seen a case of glanders; nor had Dr. Carson or Dr. Luedeking. I looked in "Holmes' Surgery," at the article on glanders, aad found there a very good illustration of the disease just as I saw it; the description answers the case very well. The man had been a driver of a street car. I went to the stable and inquired if they had any horses suffering from that trouble and they said they had not. But as the man had been driving a street car, I suppose that was about as good a place to get the disease as any, as there are people constantly standing on the platform, and I learned that there have been some cases of glanders in Illinois; possibly the man got the disease in that way. I don't know how else to account for it. The man died yesterday afternoon.

Dr. Gregory.—Was there any post-mortem?

Dr. Wesseler.—No, sir; Dr. Luedeking saved some of the pustules for examination with the microscope.

Dr. Gregory.—Had any abscess formed?

Dr. Wesseler.—There was no abscess. There was swelling of the eyelids, and the eyes were closed. There was some secre-

tion from the eyes; there was not much secretion from the nose. There was an intense dryness, similar to an erysipelatous inflammation, about the nose.

DR. GREGORY.—It seems to me that it would have been very interesting to have made a post-mortem. But there is one point in connection with glanders which is doubtless remembered by the gentlemen; that is abscess in the substance of the muscle itself. This is a feature—a characteristic feature—when present a pathognomonic one and necessarily presupposes glanders.

On Some Points in Regard to Outbreaks of Asiatic Cholera By Geo. Homan, M. D.,

Inasmuch as a more or less well defined feeling seems to now exist among the people in some parts at least of the Mississippi valley, that a visitation of Asiatic cholera may be expected here at no distant day and, further, as this feeling seems to be based on the common belief in the reappearance of cholera in North America at intervals of about seventeen years it may not be out of place to sketch in bare outline and give sharp prominence to some of the facts and truths in relation to this disease that have most fully commended themselves to the sober, unbiased and practical judgment of those generally deemed best qualified to pass upon the matter in question. This may be done now with a degree of fitness as the subjects of the nature, origin etc. of this disease were touched upon when the question of the cholera epidemic of 1873 in this country was broached in this society several weeks ago. And whatever may be here said is not put forth with the least hope of adding any new facts to the almost limitless literature of cholera, but, mainly from the standpoint of preventive or state medicine, to refresh the minds of members present and, at the outset, to enter a protest against a tendency too common among medical men to search the clouds and visit the moon in seeking the causes of infectious diseases when in all probabillty they exist under our very noses, in local unwholesome conditions that should in reason silence the voice of vague and fruitless speculation as to how diseases originate and spread, until critical and painstaking search and work have uncovered and eradicated every possible source of danger to individual and public health.

From the best evidence it may be safely said that the place of origin of cholera was the delta of the Ganges where, under tro-

pic heat and moisture in the midst of a teeming population whose traits and customs made them ripe for disease, its specific principle reached a maturity and energy that have more than once enabled this mortal agent to reach the antipodes of its nativity, where its seeds have borne fruit with fatal effect, here in the very centre of the Mississippi valley. And it would seem in view of many facts that the seeds of disease may be spoken of with as much fitness of language as are those of vegetable or animal life, as there is much likeness as regards the conditions necessary to germination or quickening and growth; for, even in its chosen home, cholera springs and ripens to epidemic fullness only under the favoring powerful agencies of heat and wet and proper soil, joined with other helpful though minor influences. As the delta of the Ganges and the Bengal coast doubtless witnessed the beginnings of this disease, so the lower plain of that stream is its domestic nursery and favored dwelling place, an area containing the largest and densest population under tropical influences that the inhabited world can show, in numbers amounting to upwards of 200 millions, a majority of whom live in villages and cities and who are prone to practices of domestic uncleanness, that are by the best accounts alike disgusting and notorious. The Ganges is the drainway of this enormous population and its defilement with the organic, diseased and excretal wastes of human life has been continuous through uncounted centuries, and its output from the spreading, sluggish waters at the delta, represents the aggregate foulness of burden and deposit needed for the beginnings and propagation of a swift and virulent infection. It has been said that the cleansing of India would require that it be swept by fire, ploughed by glaciers and sunk beneath the waters of the ocean; but even if this be part exaggeration it is still reasonable to believe that in the customs and homes of its people is to be found the explanation of the existence of a plague that has found victims in nearly every quarter of the habitable earth. And these habits or customs are so closely inwoven with superstitions, beliefs and traditions of religion, race and country, that it is asserted that to attempt to enforce upon the inhabitants any change in this respect would provoke an insurrection and conflict compared with which the Sepoy rebellion would be insignificant.

Born of mankind thus situated and fitted to be borne by him from place to place with conspiring efficient and unusually deter-

minable agencies, the fatal and wide spreading tendency of cholera is heightened and promoted by the multiple and complex pilgrimages, fairs, feasts and festivals, both religious and commercial, that continually take place in India among its Hindoo and Mohammedan peoples. This ebb and flow of population reaches from one end of the land to the other and often results in the massing, in one place of not myriads only but millions of human beings, as has been witnessed at the twelfth year festivals at Hurdwar and Juggernaut at either end of the valley of the Ganges. At such multitudinous gatherings of wayworn devotees, assembled at the opening of the rainy season with every attendant circumstance of privation, infirmity, filth and actual disease, is planted and grown the pestilence that has again and again ravaged continental Europe and the western world. And beyond all dispute from the cholera outbreak at the Hurdwar festival in 1867, the poison of which was carried thither from the southern districts where it is always present, came the seeds of the epidemic of 1873, in the United States. When the festival broke up in April the dispersing pilgrims carried active infection into almost every part of Asia; it was forwarded to Arabia via Bombay by the throng of Mohammedan pilgrims pressing on to the shrine at Mecca, and after renewing its violence there was thence promptly distributed to Eastern Europe, finding fit lodging place and congenial soil in the foul cities and amidst the filthy peasantry of Turkey and Russia. Moving steadily westward it traversed the Austrian and German States and was present in Holland, Belgium, and Great Britan early in the seventies. Several branching offshoots from European centres of infection reached this country, one brushing the North Atlantic coast, and another sending the disease up the Mississippi valley through culpable laxness of quarantine measures at New Orleans. The facts regarding its successive progress up the valley as far north as Iowa, by means of common carriers, are well known, although in respect of panic and mortality this outbreak was overshadowed by the visitation of 1866. It is of interest, however, to note that distinct implantings of the disease occurred one each in Ohio, Minnesota and Dakota from direct importations through New York of the poison by means of infected baggage of emigrant bands who were ticketed through from villages in Holland, Sweden and Russia where cholera was prevailing at the time of their departure; but by intelligent, energetic action the dis-

ease was uprooted in its infancy, the great majority of victims being among the immigrants themselves.

It is safe to say that it is within the power of man to control the cause or causes of this disease to its prevention provided always governments and peoples deem this end worth the effort, and are willing to expend in such attempts a tithe of the fore thought and time and means devoted, for instance, to warlike purposes; and make the same intelligent provision to forestall ripening pestilence as is shown in meeting maturing financial obligations.

While there are some things not fully known about cholera there is no mystery at all as to how it is spread, and the conditions most favorable to its existence. Such a curse cannot come without cause and a country that puts a proper value on the principles of preventive medicine, intelligently applied, is a country fortified against foreign pestilence; and in the face of an epidemic it presents something reassuring, trustworthy and real as compared with the terrors, uncertainties and disasters that attend the best efforts of curative medicine under similar circumstances. For cleanliness of house and city and nation will as surely render sterile the soil needed for the rooting and growth of cholera as properly performed vaccination and revaccination will protect against small pox. The healthful condition of the European portion of Calcutta, a city situated in the very heart of the home of cholera, shows what may be done in mitigation, if not prevention, of this disease by the application of radical measures to public health ends. In order that the best results be secured commerce, both marine and inland, must consent to forego at times some slight immediate gain for the sake of the vastly greater future benefits to follow temporary restraints in interest of general good health; and it follows that a watchful state of preparedness, both municipal and national, should ever be maintained that exotic disease, if it be smuggled in, shall gain no sure lodgment.

As the questions may naturally arise here as to when and how often renewed visits of cholera to America may occur it may be worth while to see what foundation there is for the before mentioned popular belief in periodic seventeen year intervals, although this is more apparent than real,and that it is not invariable is shown with much meaning by the shortness of the period between the distinct epidemics here in 1866 and 1873. An

explanation of the previous apparently established periodicity of cholera may perhaps be found in the facts that the outbreaks felt by Europe and America have usually had their starting point in Arabia,—Jeddah, the Red sea port of Mecca, having always been particularly active in its exportation by way of Suez to the Mediterranean coasts. The disease of course is first carried from India by pilgrimages to Mecca which occur at varying times of the year owing to the fact that the Mohammedan calendar recognises only the lunar month and year in determining the dates of religious festivals held in the holy city. A particularly important religious ceremony occurs every twelve or fifteen years which is attended by multitudes of the faithful, and the cyclical date of which falls soon after the enormous gatherings in India, and at the season of the year most favorable to the development of disease. The befoulment of earth, air and water in the valley in which Mecca is situated, and where the pilgrims encamp, is spoken of as being something astonishing and that cannot be readily discribed. Here the transplanted disease springs to most vigorous growth and is thence distributed to Europe.

The facts that the number of pilgrims is yearlygrowing less and that, through Western influence, greater attention is being paid throughout the Orient to cleanliness and disinfection, taken in connection with the further fact that new, quick and direct routes to India by rail are now being opened up, destroys the value of conclusions drawn from circumstances that have, in the past, probably governed or strongly influenced the spread of cholera; and it is now easily possible for the infection to be delivered direct from India to west European and American ports without any intermediate fostering in Arabia, Syria, Turkey or Russia.

And here may be appropriately introduced a series of brief propositions formulated in obedience to the joint resolution of Congress approved March 25th 1874, and embodied in the report on the cholera epidemic of 1873 in this country, made in accordance with that resolution under direction of Surgeon-General Barnes by the late Dr. Woodworth of the Marine Hospital service, the late Dr. Woodward of the army, Surgeons Billings and Mc. Clellan of the army, and Dr. J. C. Peters of New York. These propositions relate to the prevention of cholera and are as follows :

I. Malignant cholera is caused by the access of a specific organic poison to the alimentary canal; which poison is developed spontaneously only in certain parts of India, (Hindostan.)

II. This poison is contained primarily, so far as the world outside of Hindostan is concerned, in the vomit, stools and urine of a person already infected with the disease.

III. To set up anew the action of the poison a certain period of incubation with the presence of alkaline moisture is required, which period is completed within one to three days; a temperature favoring decomposition and moisture or fluid of decided alkaline reaction hastening the process, the reverse retarding.

IV. Favorable conditions for the growth of the poison are found (1) in ordinary potable water, containing nitrogenous organic impurities, alkaline carbonates, etc; (2) in decomposing animal and vegetable matter possessing an alkaline reaction; (3) in the alkaline contents of the intestinal portion of the alimentary canal.

V. The period of morbific activity of the poison—which lasts, under favorable conditions, about three days for a given crop—is characterized by the presence of bacteria, which appear at the end of the period of incubation and disappear at the end of the period of morbific activity. That is to say, a cholera-ejection, or material containing such, is harmless both before the appearance and after the disappearance of bacteria, but is actively poisonous during their presence.

VI. The morbific properties of the poison may be preserved *in posse* for an indefinite period in cholera-ejections dried during the period of incubation, or of infection matter dried during the period of activity.

VII. The dried particles of cholera poison may be carried (in clothing, bedding, etc.) to any distance; and when liberated may find their way direct to the alimentary canal through the medium of the air—by entering the mouth and nose and being swallowed with the saliva—or, less directly, through the medium of water or food in which they have lodged.

VIII. The poison is destroyed naturally either by the process of growth or by contact with acids; (1) those contained in water or soil; (2) acid gases in the atmosphere; (3) the acid secretion of the stomach.

IX. It may be destroyed artificially (1) by treating the cholera-ejections, or material containing them, with acids;(2) by such acid (gaseous) treatment of contaminated atmosphere; (3) by establishing an acid diathesis of the system in one who has received the poison.

These propositions embrace the conclusions drawn from an impartial and searching study and comparison of trustworthy data regarding cholera laboriously collected by the government in the nineteen states and territories invaded by it in 1873.

In view of the growing uncertainty, before referred to, in reference to time of its future movements, and the question being its exclusion from this country, it is plain that a seaboard quarantine of exacting purification of persons and things, and in every suspected case one of detention and observation, will thwart the energies of foreign infection securely packed and preserved though it may be in the hereditary filth brought over in the baggage and household effects of immigrant colonies or individuals. But it is not impossible that the disease, at times of onset and wide prevalence, may force the seaboard line of defence, and hence follows the need for means of interior protection. And the fact that several places within or near this valley have become extensive depots and distributing points for immigrants emphasises the necessity for a stable, controlling health authority beyond that which cities and states can afford. To foster and activily support such efficient governmental agency would seem the plain duty of every physician; and it is encouraging to believe that with the help of not doctors only, but of every intelligent person, the day may soon be brought to pass when it shall be impossible for this most preventible disease, striking hands with panic fear, to girdle the earth with dread and death to suffering man.

DISCUSSION.

DR. HUGHES.—I would ask Dr. Homan if the idea of association and attributing the periodic outbreaks and spreading of cholera in India to the periodic festivals that occur every twelve or fifteen years, is an original one, or whether he derived it from some authority? It is a new idea to me, and it seems to be quite a rational explanation of the incipient origin of the pestilence.

DR. HOMAN—That fact appears in the government report on the epidemic of cholera in this country in 1873, and was alluded to, I think, by Dr. Peters, of New York.

DR. PREWITT.—The paper of Dr. Homan I regard as a very timely one. It is very certain that the public, and not only the public but the profession have not been thoroughly doctrinated in the true origin and propagation of cholera. We hear even doctors speak of it springing up from filth on the streets and various causes, betraying to my mind, a total misconception of the origin of cholera. We have filth in the city every year; just

as much this year as when cholera was prevailing, yet cholera doesn't spring up. Then the history of the disease shows upon close investigation that the disease always follows the great highways of travel, and that it is carried from point to point—the infection is carried and spreads. A very significant fact is to be found, for instance, in this, that in former years when the great mode of travel in this country was by steamboat, we never heard of cholera anywhere except in the river towns; on the contrary, in 1873, when steamboat travel had almost gone out of date, it didn't spread along the river but it spread along the railroads. The railroad towns were infected by parties going from point to point, traveling by rail, and, it was not confined to the river towns by any means. Also in 1849 when the great emigration to California was going on, it followed the wagon trains and sprang up on the plains where such a thing never had existed before. It never was heard of before among the Indians. They had never heard of cholera any more than they had heard of small-pox before the whites took it among them. Cholera does not spring up spontaneously any more than small-pox does, and when the public and the doctors come to understand this fact we may find them beginning to adopt measures to prevent the introduction of this disease, and not before. So long as this indefinite notion exists as to the origin of cholera, just so long will we have insufficient measures adopted for preventing its introduction into this country, and so long it will spread when it gets here. It has been said that during Ben Butler's stay at New Orleans he kept the city so clean that there was no yellow fever there; but his reply to this statement when made to him, was that it was nonsense; that he prevented the introduction of yellow fever by quarantining the city; and that is what we shall have to do to keep cholera out of this country.

Dr. Dickinson.—Do I understand the Doctor to say that cases of sporadic cholera never occur, instances in which are exhibited the characteristics of true Asiatic cholera?

Dr. Prewitt.—We have very violent cases of cholera morbus and diarrhœa, but we do not have Asiatic cholera; nor do they spread as Asiatic cholera does; nor is there any evidence that the poison is transmitted from one individual to another. We know as distinctly as we know anything that there is a poison in cholera that is propagated from one to another, and if

there is any thing that enables us to make a distinction between diseases, if there is any particular fact that does distinguish one disease from another, it is this thing: that a condition which is analogous to another in one instance is not communicable, and in the other is communicable. If we had a disease which resembled small-pox in almost every particular and yet was not contagious, who in this hall would say it was small-pox? We would not call it small-pox because it looked very much like small-pox.

DR. SCOTT.—Do you mean that cholera is contagious in the sense that one person may contract cholera from another?

DR. PREWITT.—I do not mean to say cholera is contagious in the sense that it is communicable by contact of one person with another. We use the term very indefinitely and very improperly. Small-pox is infectious; measles is infectious; scarlet fever is infectious; they are not contagious. Syphilis is contagious—emphatically so.

DR. GREGORY.—I would like to ask Dr. Dudley, who was health officer in 1873, whether cholera which prevailed that year was supposed to be Asiatic, or if it originated in this country? What was the supposition at the time?

DR. DUDLEY.—There were deaths recorded in this city during the year 1873 to the number of 390 probably, besides a number of deaths from what was denominated cholera morbus, amounting to 130 odd, and many medical gentlemen who were as well qualified, I presume, as any of us to unequivocally diagnose cases of cholera, declared this to be cholera. It was said that the cholera first made its appearance at New Orleans, and came into this section of the country from the South; where it came from, when it came to New Orleans, I am not prepared upon the spur of the moment to answer; whether it was Asiatic cholera, or American cholera or Missouri cholera or St. Louis cholera; nevertheless, it was clearly diagnosed as cholera and it carried off quite a number of our people. I fully agree with the gentlemen that we had cholera in St. Louis in 1873, and I was obliged to make every effort possible to prevent its spread. Whether I did any good or not I don't know. And the president, my predecessor, had to do all in his power to restrain the disease. As Dr. Gregory was a member of the Board of Health at that time, and had considerable observation, probably he can detirmime what it ought to be called.

Dr. Gregory.—It seems to me that the epidemic originated in this country. That was the information that came to me. It strikes me that cholera might originate in this country as it does in other places, and become epidemic. It strikes me that it was held that the disease originated in this country and didn't follow the ordinary laws which seem to have regulated this disease heretofore. Then there is another pount; I wish for the sake of information to ask these learned gentlemen, perhaps they can settle my mind upon this point, namely: the distinction between contagion and infection. These words are in common use among medical men and among the people and it strikes me that as a learned body we might just as well settle the question now. I must say that in my own mind I am not decided except in this wise: I believe that a disease which is communicable by contact with the poison of that disease, there must be contact with the poison or there is no communication. Some diseases result from poisons that are volatile and some diseases result from poisons that are fixed, and in those diseases which result from volatile poisons, it is necessary to come into the vicinity of its cause, in the vicinity of the originating agency to get the disease, if it be a volatile poison; if it be a fixed poison you must come in actual contact with the poison, and not only in actual contact with it, but a denuded surface must come in contact with it. A volatile poison reaches us through the mucous surface or through the skin; but a poison which is fixed must be inserted into or placed upon a denuded surface in order to produce its poisonous effects, and it has always occurred to me that the difference between contagion and infection was the difference simply of fixedness and volatility

Dr. Prewitt.—I would like to answer the first question because it is liable to lead to very grave error. If the Doctor will read the report made by McClellan, upon the cholera epidemic of 1873, he will see that it was introduced into this country at different points, and one point was New Orleans. It was introduced into the country and didn't spring up spontaneously.

Dr. Barret.—I will say that the first case of cholera in 1873 was in a negro man on Ninth and Pine Streets. He was a deck hand and came from New Orleans two days before he was taken sick. That was the first case in this city. Of course, I supposed it was a case of cholera murbus, but the man died in a few hours.

DR. ATWOOD.—In 1873 I was upon a visit to the state of Tennessee, and at that time it was said that cholera had made its appearance at New Orleans, coming from Europe. The first intimation of the existence of the disease was an outbreak of Asiatic cholera which appeared along the line of the Memphis & Charleston Railroad, and it then spread to Nashville, Tenn., where it prevailed for some time, and during the time of its prevalence in Nashville, there were one hundred deaths a day, in a town of thirty or forty thousand. The next place it appeared was at Dripping Spring just across in Illinois and Dr. Hodgen was called to treat the cases. He lost several cases.

DR SCOTT.—My mind is not made up in regard to cholera. Dr. Gregory asked the question, might it not originate in this country? In one of the latest numbers of the *New York Medical Journal*, I believe, there is an account of an epidemic of cholera in one of the States of Mexico, that originated in the month of December and continued through that month and January, with all the symptoms of genuine Asiatic cholera, and from which there were a number of deaths. And the editor asks the question, if cholera can not be originated in this country if this is the case? The editor seems to take the ground that if this be true that there has been an outbreak of cholera in one of the Mexican States, that it may be possible for it to originate in this country. Now in regard to the propagation of cholera, there are two or three points that have come under my own observation, which makes me doubt that cholera can be propagated from person to person. The first of these cases that I will relate, occurred in the town of Potosi, Washington County, this State. The only communication with St. Louis or the outslde world was by a weekly stage coach. There was some cholera in St. Louis, and the cholera made its appearance in this village, which is one of the healthiest localities in the State of Missouri. The first case was that of a French miner, a man living a mile out of town; the the next case occurred in my own family, which had no connection or communication with the miner, and the first who took the cholera in my family was our negro cook; she died and the cholera spread all through that village, of perhaps four hundred inhabitants and in less than a week there had been over twenty deaths, and we knew every man there and all who came into it. My preceptor, Dr. McClelland, was as able a

man as I ever met outside of St. Louis or in it. I was a student in his office at this time and he could find no such thing as any contact with any one who came from St. Louis, or any one else in the town by which he could account for the contraction of this disease by this miner. Then another instance was when the cholera was prevailing in this city, the town of Hillsboro, of about two hundred inhabitants, situated on a high plateau of post oak ground, was free from the disease. It is as healthy a town as there is in the State. At the time that they were burning tar in the streets of St. Louis, the smoke was carried by the wind and in the evening the fumes of the burning tar were noticable in Hillsboro, and before dark that night there were a dozen men in the town dead from cholera, the germs of the disease were certainly carried by the atmosphere by the same means which were being used to prevent the disease in this city. These are facts that have come under my observation and I do not believe that cholera is propagated in the way that Dr. Prewitt has contended that it is.

ARTICLE X.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

[Reported for the JOURNAL.]

THURSDAY EVENING, May 10th, 1883.

VICE-PRESIDENT F. P. HENRY in the Chair:

Tympanic Caries Producing Sub-Dural Abscess Opening into Lateral Sinus.

Neil D., aged 18, was admitted into Prof. Agnew's ward, in the Pennsylvania Hospital, with the following history: When he was five years of age he had measles, and since that time he has had suppuration of the R. middle ear. It discharged at intervals. Two weeks previous to admission he had acute pain in the R. ear, and a week later it began discharging. He had severe headach ever since he was first attacked. The pain was situated, principally, toward the front, but existed, also, toward the sides of the head. The discharge was profuse and offensive.

He was emaciated, his face was haggard, pale, with a slightly yellowish tinge; he had an anxious expression of countenance, and, altogether looked very bad. His mother says that this change occurred entirely during the two weeks prior to admission. The ear was cleansed and astringents applied; the discharge ceased in about six days. Bromide of potash failed to relieve the headache, but morphia, hypodermically, gave temporary relief. He held his neck stiff, with the head slightly drawn back. This increased as the disease progressed. He had naseau, and later vomited large quantities of greenish, black fluid. Three days after entrance the pains extended down the spine and into the legs, and to the under side of the arms. On the fifth day after his admission the headache, and pains in the lower extremities were very severe. The discharge had almost ceased. His temperature rose to 102.5°. An ice cap afforded no relief. On the eighth day he died.

	TEMPERATURE.		PULSE.	
Day of Entrance.	Morning	Evening.	Morning.	Evening.
9	100.°	103.°	62	86
10	101.5	101.5	70	96
11	98.5	102.4	66	80
12	99.5	100.8	68	84
13	102.	102.5	84	88
14	102.	105.4	100	102
15	103.5	102.5	106	104
16	101.6	102.	136	114
17	99.	100.	112	108

His bowels moved regularly; they were not constipated.

Post-mortem examination made twenty hours after death: Skull was very thin at all points. Dura mater apparently normal. Marked congestion of the arachnoid and pia mater, more so on the right side. No evidence of thickening or other disease. Brain normal. No excessive cerebro spinal fluid.

Region of R. Ear.—Beneath the dura mater covering the petrous portion of the R. temporal bone over the middle and int. ear, there was an abscess about an inch long. It communicated, by a small opening, with the tympanum. At its opposite extremity it opened into the lateral sinus. This was filled with pus from the point of opening to within two inches of the torcular herophili. These two inches were filled with a soft, black clot. Below the point of opening to the jugular foramen there

was thick pus and a partly decolorized clot, much firmer than the one entering in the direction of the torcular horophili.

Remarks.—The congestion was active, not passive. It was most marked on the surface of the brain. The large veins were not distended, and there was, consequently, no excess of fluid. The patient's mind was clear to the last. The most marked feature of the case was the emaciation, which was very rapid. An interesting point in connection with the case is the cause of death. It seems to have been due to the entrance of pus into the circulation—in other words, it was probably a case of true Pyæmia. He had two marked symptoms of pyæmia, the sallow countenance and the rapid emaciation; besides these, he had the vomiting. He never had the slightest chill, or the sudden rise and fall of temperature, both so marked in cases of pyæmia. Sweet breath, and any external abscesses or lung affection were also absent. I was unable to examine the other organs.

Specimens (Lungs, Heart and Kidneys) From a Case of Bright's Disease. Presented by Frederick P. Henry, M. D.

The organs upon the table were taken from a typical case of chronic parenchymatous nephritis. The kidneys are slightly enlarged, extremely pale, with marked arborescent vascularity of the surface, and with non-adherent capsules. In fact, they represented one of those instances in which the gross appearance suffices for diagnosis. The heart is slightly enlarged, its left ventricle dilated, its wall fatty, and its valves competent. This heart gave rise to no murmur, strictly so called, but did produce, in typical degree, the sound, called by Bouilland and Potain, the *bruit-de-galop*. Potain considers this sound to be diagnostic to be of interstitial nephritis, but for my part I have invariably encountered it in cases of Bright's disease, in which the parenchymatous affection was predominant. The lungs are congested aad œdematous throughout. The pleural is greatly thickened on both sides, and the pleural cavities abolished, with the exception of the diaphragmatic portion of the right side, which contains a small amount of fluid in the shape of a number of serous-containing loculi. The cause of death was œdema of the lung, and the interesting question arises as to whether œdema of the lungs, which is so common an event in cases of Bright's disease, may not be favored by the obliteration of the pleural cavity, also commonly present in these

cases; or, in other words, and conversely, whether the pleural cavity may not serve as on outlet for effusions which, but for its presence, would infiltrate the lung parenchyma. Although my attention has not been specially directed to the point which I have just raised, and therefore I have no other cases than that just reported, to bring forward in its support. I think I can state, in general terms, that before œdema of the lungs occurs, in cases with open pleural cavity, that cavity contains a considerable quantity of fluid. That is to say that its capacity to act as a drain to the lung tissue is exhausted, and it does not at all follow that, for this result to be produced, the pleural sac should be *distended* with fluid. In fact, it would seem that a moderate amount of fluid in the pleural sac may be sufficient to exhaust this conservative power, and this amount varies with the state of the pulmonary circulation. The view just advanced is in comple harmony with what we know of the physiological function of lymph spaces, among which the larger serous sacs are reckoned. The last volume of our transactions (vol. x) contains a paper upon pleural effusions, in which I argued, at considerable length, that any cause which interfered with a proper expansion of the thorax, would lead to congestion of the pulmonary capillaries, thereby favoring pleural effusion. The results of capillary congestion vary in different systemic conditions. In Bright's disease, owing to the altered state of the blood, the result is œdema, that is, a serous infiltration of lymph spaces. Effusion into the serous investment of organs, such as the lungs and heart, is conservative so far as concerns the parenchyma of these organs. The practical result of these considerations is that œdema of the lung, in cases of Bright's disease, is favored by pleuritic adhesion, and, secondly, that œdema of the lung may, perhaps, be averted by the timely performance of paracentesis.

Myxomatous Tumor of the Subcutaneous Cellular Tissue of the Chest. Presented by Dr. MacConnell.

The specimen was removed by Dr. Allis, at the Jefferson Hospital Clinic, one week ago. The patient was a man aged 63 years, who stated that six years ago he had been struck on the side of the chest by a box at a spot corresponding to the site of the tumor. The growth commenced shortly after this traumatism, and at the time of the operation was of the size of a

pecan nut. The microscropical appearances were somewhat the same as those presented by the specimen presented for him by Dr. Nancrede in December, 1880. The present specimen very beautifully illustrates the transitional stages of the fœtal development of blood vessels, such as budding, etc. Abundant yellow elastic tissue is also seen. The cells are but faintly stained with picro-carmonic, owing to the highly refractive substance of the growth, mucine rendering the coloring of the nucleus indistinct. Dr. MacConnell thought that the apparent rarity of similar growths was due to the use of alcohol for hardening purposes. If such a reagent be used only, the appearances of a young connective tissue growth will be detected.

Article XI.

The Southwest Missouri Medical Society.

The Southwest Missouri Medical Society met at Carthage, Mo., on May 1st. Dr. H. C. Dalton, President in the chair.

The Secretary being absent, Dr. Rhoads was elected Secretary pro. tem. On the roll being called, fifteen members responded to their names. The minutes of the former meeting were read and approved, and the regular order of business taken up by the reading of the President's Address.

While the number was not large, yet the meeting was very interesting and enthusiastic, all the members taking a very active part in the discussion. The papers read were of a high character and showed great research and study. The paper by Dr. R. F. Brooks, of Carthage, on Electricity, was accompanied with Report of Several Cases Treated, among which were, Locomotor Ataxia, and Stricture of Urethra.

Dr. D. V. Wale's paper was on the Effects of Quinine on the Gravid Uterus; this paper was ably discussed, and the opinion of a majority of the members were, that in weak subjects it undoubtedly contributed to bring on premature efforts of the womb.

Dr. E. B. Pinney read a Report of a Case of Pyæmia, which was ably discussed.

The following officers were elected for the ensuing year: Dr. Aug. Roades, of Carthage, President; Dr. R. F. Brooks, of Carthage, Vice-President; Dr. W. C. Otterson, of Springfield, Permanent Secretary; Dr. L. D. Matthews, of Carthage, Corresponding Secretary; Dr. H. C. Dalton, of Neosho, Treasurer.

Next place of meeting, Pierce City, first Thursday, in May, 1884, and it is requested that all the members of the society will be present, as these local societies are paramount in developing the talent of members and in bringing them into notice.

ARTICLE XII.

MISSOURI STATE SOCIETY.

THE Following is a list of the Committees of the Missouri State Medical Association for 1884. Place of Meeting, Sedalia. Mo.

STANDING COMMITTEES.

Of arrangements.—J. W. Trader, M. D., J. W. Jackson, M. D., Willis P. King, M. D., W. C. Overstreet, Jr. M. D.,

Committee on Credentials.—P. S. Fulkerson, M. D., C. S. Todd, M. D., J. W. Brent, M. D.,

Committee on Scientific Communications.—L. I. Matthews, M. D., J. H. Duncan, M. D., W. J. Beaver, M. D.,

Committee on Progress of Medicine.—P. J. Henderson, M. D., J. W. Dreyfus, M. D., C. N. Gerard., M. D.,

Sub-Committee an Psychological Medicine.—Chas. H. Hughes, M. D., G. C. Catlett, M. D.,

Sub-Committee an Diseases of Children.—J. P. Kingsley, M. D., W. E. Fischel, M. D.,

Sub-committee on Skin Diseases.—W. A. Hardaway. M. D.

Committee on Progress of Surgery.—Frank J. Lutz, M. D., J. W. Griffith, M. D., R. E. Young, M. D., T. F. Prewitt, M. D. J. F. Berghoff, M. D., A. W. McAlester, M. D.,

SUB NITRATE BISMUTH,

Manufactured by the MALLINCRODT CHEMICAL WORKS, ST. LOUIS, is absolutely pure, free from smell and taste so objectionable in some makes, very white, bulky and superior. Physicians are requested to convince themselves of the excellent quality of this article by a careful trial and examination.

Always Specify "MALLINCKRODTS."

Editorial Notes.

We would call the attention of our readers to the advertisment of R. L. Polk & Co. Any one desiring to look up a good location for a physician or druggist, can do no better than to confer with them, as seen in their list of advertisments in this Number. We will say that we could not get along without the lists of Physicians, as furnished by L. Polk & Co.

A Surgeon once jestingly asked a Quaker if he could tell the difference between "likewise" and "also." "Oh, yes," said the Quaker; "Sir William Ferguson was a great surgeon—his skill as an operator was admitted by almost every one. You are a surgeon 'also' but not 'likewise.'"—[*Weekly Med. Review.*

The preparation of Park, Davis & Co. are so well known and have been so thoroughly tried by the profession at large, that it would seem useless to say anything in regard to them. But we can say especially in regard to their Fluid Extracts and Jelatine Pharmaceuticals, that all those that we have tried, and we have tried a number, have been just as they are represented, and we heartily commend them to the notice of the profession. [See advertisment.]

Sounds from the Consulting Room.—"How long will it take you to cure me, doctor?" "Well, Mr. Blank, I think you can get back to your desk at the bank in about a month, but you will have to remain under treatment for many years." "But you mistake; I am not Mr. Blank the banker, but Mr. Blank the letter-carrier." "Oh, that alters the case, there is nothing the matter with you. You will be well in a month."

THE question is often asked, "what shall I give my sick baby?" Why of course, RIDGE'S FOOD for Infants and Invalids. This food is an excellent food for Invalids and especially Infants. "Its soothing and satisfying properties are so marked that customers often inquire if it does not contain opium."

It is highly recommended by Dr. Mead, Licentiate of the London College of Physicians. Physicians as yet unacquainted with RIDGE'S FOOD, will confer a favor on the manufacturers, by writing for a sample for the purpose of testing its merits. [See advertisment.]

GLASS coffins have been proposed in France to take the place of ordinary wooden ones and to prevent the spread of the products of decomposition from the body. Gases preventing putrefaction might be forced into these glass cases and the corpse thus kept in the best possible condition.

To those physicians who use Iron, we would call attention to the preparations of GRIMAULT & Co., their Iron preparations are in solution without the aid of acids or other solvents, their Iron preparations are made both in the form of Solution and Elixir, when a slight stimulation is desired. It will pay you to read their advertisment in this Number.

AN INSTANTANEOUS LIGHT.—Such in a word is the unique apparatus on exhibition at the rooms of the Portable Electric Light Co., 22 Water Street, Boston. It occupies the space of only five square inches and weighs but five pounds, and can be carried with ease. The light, or more properly lighter, requires no extra power, wires or connections, and is so constructed that any part can be replaced at small cost. The chemicals are placed in a glass retort; a carbon and zinc apparatus, with a spiral platinum attachment, is then adjusted so as to form a battery, and the light is ready. The pressure on a little knob produces an electric current by which the spiral of platinum is heated to incandescence. The Portable Electric Light Company was recently incorporated, with a capital of $100,000, under the laws of Massachusetts. The usefulness of the apparatus and the low price, ($5) will no doubt result in its general adoption. Some of the prominent business men of the State are identified with this enterprise. In addition to its use as a lighter, the apparatus can also be used in connection with a burglar-alarm and galvanic battery.—[*Boston Transcript*, Dec. 30.

Sub-committee in Gynæcology.—Wm. L. Barret, M. D., P. V. Schenck, M. D., G. A. Moses, M. D.,

Sub-committee an Orthopædic Surgery.—Jacob Geiger, M. D., T. S. Potter, M. D.

Sub-committee an Railroad Surgery.—J. W. Jackson, M. D., Pinckney French, M. D., F. M. Johnson, M. D.

Sub-committee an Abdominal Surgery.—Geo. J. Engelmann, M. D., Edw. Borck, M. D.

Sub-committee an Geinto-Urinary Surgery.—G. Halley, M. D., W. W. Ford, M. D.

Sub-committee on Ophthalmology, S. Pollak, M. D., F. B. Tiffany, M. D.

Committee on Medical Education.—J. E. Tefft, M. D., J. P. Chesney, M. D., W. Humphey, M. D., J. S. B. Alleyne, M. D., G. M. Dewey, M. D.

Committee on Medical Ethies.—A. E. Gore, M. D., E. W. Schauffler, M. D., W. C. Glasgow, M. D. H. H. Middlekamp, M. D., F. J. Norris, M. D.

Committee on Publication.—E. M. Nelson, M. D., C. H. Hughes, M. D., E. C. Gehrung, M. D.

Committee on State Medicine.—J. W. Allen, M. D., D. H. Shield, M. D., G. Hurt, M. D., W. J. Heddens, M. D., N. M. Baskett, M. D.

ARTICLE XIII.

TRI-STATE MEDICAL SOCIETY.

THE Ninth Annual Meeting of the Tri-State Medical Society will be held in Indianapolis, Sept. 18th, 19th and 20th. The work is already far advanced and the title of each paper should be sent in at once. Papers must not exceed twenty-five minutes.

It is also the rule that each physician who registers must be a member of a local or State society in good repute. All such are invited.

Notice of papers or cases to be presented may be sent to the Chairman of the Committee on Programme, Dr. J. L. Thompson, Indianapolis, or the Secretary, Dr. G. W. Burton, Michell, Ind. or to the President, Dr. Wm. Porter, St. Louis.

Correspondence.

Article XIV.

Editor Journal:

I was called to see a sick child, and after attending to it the mother incidentally remarked that the hired man—a baker—had an irritation in the throat, very severe at times and asked me what it could be. I sent for the man and on examination, saw, as I thought, a fishbone about two inches long, arched forward and both ends fast in the walls of the pharynx on the right side and a little below the level of the tongue. With an ordinary dressing forceps I grasped it in the middle, when the forward end loosened and wriggled about the forceps; the other end being fast in the mucous membrane, required somewhat of a jerk to loosen it, leaving an opening about the size of a pin head in the mucous membrane, which bled profusely, relieving the patient instantly. He had complained of the irritation about one year. The uvula would be tickled, producing a cough. On examining the throat I found the posterior pillar on right side swollen, red and cut as though with a fine rasp. The worm, for such it proved to be, when placed in water swam about, spreading the lower part of its body, the edges being sharp and serrated, the rest of the body being round, terminating in a head about one-sixteenth of an inch in size. I placed it in my prescription book, intending to make a microscopal examination, and had the pleasure of showing it to Dr. Gill, of this city. Unfortunately I lost it in using my book. I never before met or heard of such an animal, and find no description of it in any work.

Thinking it might be of interest, I send you the above facts.

Respectfully,

Charles Garcia, M. D.,

Physician and Surgeon to St. Mary's Infirmary.

The following is a communication received from Wm. Lomax, M. D., one of the members of the Indiana State Board of Health, in regard to the action of the Board in deposing Dr. Thad. M. Stevens, Secretary and Executive Officer of that Board:

EDITOR JOURNAL:

I wish to enter my protest against the action of this Board at its last meeting in summarilly deposing its secretary by declaring its office vacant without first preparing charges reduced to definite specifications of nonpeasance, mispeasance or malpeasance in officer and without giving due notice and a fair chance of defense against said charges, as arbitrary and grevious in accusing and condemning without in the same act and by the same body, performing all the judicial function of prosecutor, witness, judge and jury without permission or defense on the part of the deposed, and as ungenerous towards the author of the law himself who drafted the law and engineered it into a statute, creating the very board whose reflex gratitude has been so strongly expressed by expelling him from an office, his energy and influence more than those of any other man have contributed to create.

I further wish to express an earnest hope that the reputation of this Board, for wisdom and generosity, may never again be marred by a repetition of a similar proceeding.

WM. LOMAX, M. D.

Indianapolis, Ind., April 19, 1883.

Clinical Reports from Private Practice.

Article XV.

An Obstinate Case of Diabetes Insipidus with Treatment. By E. A. Chancellor. M. D. St. Louis. Mo.

No class of cases coming within the scope of a general practitioner are more harassing and obstinate than those of diabetes insipidus and mellitus; obviously, on account of the prolonged course of medication, the usual slow and unsatisfactory improvement, together with the longing anxiety of the patient for a "speedy cure" whose only solace is found in discouragement and dispair.

In the early part of November '82, a gentleman from Nebraska consulted me about his son, whom he said was passing "gallons of water" in the twenty four hours, he had been under treatment for twelve months with regular and irregular physicians, but no improvement in his condition was apparent.

On Dec. 7th '82, the family moved to St Louis and visited me on the succeeding day with their son and gave the following history:—

Frank U., age 9, a bright and intelligent lad, thin and emaciated, weight 65 pounds, skin dry, harsh and salor, voracious appetite and thirst, costive with a great amount of flatulency, a "dumb chill" twice weekly, together with a marked ague cake, the urine was examined and found to be watery and of low specific gravity (1015) with no sugar nor abnormal ingredients, passing 2½ quarts during night and 4½ to 5 during the day, frequent micturition every half hour, this condiction had been constant for two or more years. Attention was at once called to the malarial condition and patient was put on fl. ext. warhoo, comp, tr. cinchona and tr. nuc. vom., having painted the left hypochondriac and lumbar regions thoroughly with tr. iodine.—

On Dec. 12th bowels more regular, increased thirst, no appearance of chill nor any diminution in quantity or quality of water, directed salicylic acid, fl. ext. belladonna and corbonate of

lithia in proper proportions to be taken every three hours and dose to be gradually increased, instructions were given for warm baths twice weekly and patient to be clad in flannel, his diet received the strictest attention and hygienic measures were rigidly enforced.

Dec. 21st. no improvement in the amount of water passed, yet, rests more quietly and not up so often during night, a chill on Dec. 19th, complexion clearer with two stools daily, painted left side with tr. iodine and requested the same to to be done every third day until seen again.

Dec. 27th, no chill, with slight diminution in quantity of water passed during the night. Appetite good and bowels regular, medicine continued.

Jan. 2nd a small decrease in amount of urine passed during the day and night, micturates about eight times during the former with 3½ quarts and only three times during latter with 1½ quarts, no chill, general health improved with again of one pound of flesh.

Jan. 24th. former medicine discontinued, no chill nor any apparent improvement in the water (sp. gr. 1017) appetite voracious, skin soft and complexion good, bowels regular, directed fl. ext. ergot (gtt.xx) and Pearsons arsenite of soda (gtt. 4) to be taken three to four times daily after food.

Jan. 31st. a slight change in the amount of water passed not so frequently during the night and rest better. No improvement during the day, medicine and baths continued.

Feb. 14th. a marked improvement in general condition, passed water only twice during nights and only four to five times daily, quantity and quality diminished, dose of arsenic increased from five to six drops three times daily.

Mch. 6th. patient so improved thought it advisable to return home and continue medicine.

Mch. 19th. at home, general health good and no polyuria medicine discontinued.

Editorial.

Article XVI.

We are happy to see that the American Medical Association has decided to publish the proceedings of the association, in journal form; we think this a decided improvement over the old form, as then the members had to wait a year for the proceedings of the last meeting, which had grown old, but in this form the proceedings will reach every member in such a form and in such a quantity, that the interest will be kept up and more will be read by the physicians.

And to crown the new venture as a success, Dr. N. S. Davis, the father of the association, is to be editor of the new journal; this fact insures that the work of the editorial department will be carried out in a prompt and efficient manner.

Dr. Fernandez will take Dr. A. B. DeLuna's place on the *Chronica Medico-Quirurgica de la Habana.* We wish the Doctor every success.

With this Number of the Journal, its management has been entrusted to Mr. Frank M. Rumbold. All business communications should be addressed to him at 2622 Washington Ave., St. Louis, Mo.

Book Reviews.

Article XVII.

The Diseases of Woman, a Manual for Physicians and Students, by Heinrich Fritsch. M. D. Translated by Isidor Fürst. With 159 Engravings. (New York: William Wood & Co., 56 & 58 Lafayette Place, 1883.)

This is the March issue of Wood's Library of Standard Medical Authors. It contains sixteen chapters, embracing anatomy, physiology, general diagnosis, antisepsis, therapeutics, the various diseases and malformations. Forty-six pages are devoted to dislocations, its etiology, anatomy, symptoms, diagnosis and treatment. Forty pages are given to new formations, forty more to diseases of the pelvic connective tissue, the pelvic peritoneum, the uterine ligaments and the tubes. The remainder of the work treats of disease of the ovaries and of hysteria.

The work is highly practical and well suited to the general practitioner.

The Microscope and its Revelations, by William B. Carpenter, C. B., M. D., LL. D,, F. R. S., F. G. S., F. L. S. Sixth Edition. Illustrated by 26 Plates and 500 Wood Engravings. Vol. I. (New York: William Wood & Co., 56 & 58 Lafayette Place, 1883.)

This is the April number of Wood's Library of Standard Medical Authors. The first chapter deals in the optical principles of the microscope, such as the laws of refraction, construction of acromatic objectives, immersion systems, simple and compound microscopes, etc.

The second chapter deals in the construction of the microscope. The third, accessory apparatus. The fourth, the management of the instrument. The fifth, preparation, mounting and collecting of objects. The sixth, microscopic forms of vegetable life.

It is evident that this work will be welcomed by the subscribers of the library. The author has aimed to combine within a moderate compass, that information in regard to the use of this instrument and its appliances which is most essential to the working microscopist, with such an account of objects such as are best fitted for this study, and to qualify him to comprehend what he observes. There is no doubt that these volumes—this being the

first one—will lead to the more frequent use of the microscope, both as an instrument of scientific research and as a means of gratifying a laudable curiosity and obtaining a healthful recreation.

THE TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION INSTITUTED 1847. Vol. XXXIII. 8vo., pp. 669. (Philadelphia: Printed for the Association, Times Printing House, 725 & 727 Chestnut St., 1882.)

This is much the smallest volume that has been issued from this large association for many years.

Dr. J. V. Shoemaker's article on the Therapeutic Action of Potassium Chlorate is one that will lead a great many physicians to again try this remedy, to be again disappointed in its effects. I am very certain that Dr. S. has not been successful in the employment of this agent in chronic catarrh of the nares and larynx, yet he says "it has, when constantly used, in many persons, a positive and curative action."

"Its frequent and long continued use, as a gargle in chronic inflammation of the fauces and pharynx, in the proportion of one drachm to a goblet full of water, will very often remove all congestion, dryness and excessive flow of mucous, prickling and irritability of the parts, (chronic catarrh of the fauces and pharynx) and restore them to their healthy condition."

If the secretion that he speaks of here was formed on the fauces and pharynx, this gargle might be of some benefit, but when we know that the muco-pus gravitates from higher parts of the fauces and pharynx, then of course the removal is not a curative process.

On another page he treats ozœna by douching the parts with a solution of this salt, using a drachm to a pint of water. Now we know that he cannot be successful in this, as with the common or Weber douch, all parts of the nasal passages cannot be reached and it is well known that this remedy has been tried in this way many hundred of times during the last twenty years, with signal failure. I am astonished that he did not try it in cases of ophthalmia. Its success in these affections are on a *par* with that of diseases of the mucous membrane of nasal the passages and the fauces.

Dr. Turnbull, of Philadelphia, read a paper on diphtheria with paralysis of the palate and extension into the nasal cavity and Eustachian tube. In this paper he relates a very interesting case effected by paralysis.

Dr. Henry O. Marcy's address on fibroid tumors of the uterus, while quite a lengthy one, may be considered as an epitome of the latest views of the profession on this subject. This article is illustrated by fourteen heliotypes which represent, in the most perfect manner possible, sections of various tumors.

In the sections on surgery and anatomy are found many valuable contributions. It is very seldom that we see in one short paper, the history of so many successful operations as are found in Dr. W. A. Byrd's address on surgery.

The section on ophthalmia, otology and laryngology occupy in all seven pages, but few papers were read, the discussion of them are given.

The report on necrology reminds us of the large number of prominent members that have died during the past year.

T. F. R.

Therapeutic Handbook of the United States Pharmacopœia. Being a Condensed Statement of the Physiological and Toxic Action, Medicinal Value, Methods of Administration and Doses of the Drugs and Preparations. In the latest Edition of the United States Pharmacopœia, [Apothecaries' and Metric System]. With some Remarks on Unofficinal Preparations, by Robert T. Edes, A. B., M. D. 8vo., pp. 397. (New York: Wm. Wood & Co., 1883).

As the title page implies, this is a work more for the pharmacist than for the physician.

An Index on the Practice of Medicine, by Wesley M. Carpenter, M. D. 12mo., pp. 304. (New York: Wm. Wood & Co., 56 & 58 Lafayette Place, 1883.)

This is a very neat little work and may be conveniently carried in one's pocket. The book is gilt edged and has a Russia leather, pliable cover with pocket-book lap. It is printed on fine, firm, thin paper, having blank interleaves, which will allow very full notes to be made on the treatment, etc., of any of the diseases mentioned. It is designed as an aid to the study and practice of medicine, for which it is well fitted. The author states that it has been prepared exclusively from a clinical standpoint. His aim has been to give an outline of symptomology which represents the views of a majority of our best authorities.

Lectures on Orthopœdic Surgery and Diseases of the Joints. Delivered at Belleview Hospital Medical College, During the Winter Session of 1874–75. By Lewis A. Sayer, M. D. Second Edition, Revised and Greatly Enlarged, with 324 Illustrations. 8vo., pp. 569. (New York: D. Appleton & Co., 13 & 15 Bond St., 1883.)

The first edition of this work was printed in 1876. This edi-

tion has been carefully revised and the entire work has been rëarranged in a more systematic and classified order, and a few new chapters are added. There are fifty-two new illustrations.

The whole work is a series of lectures, numbering thirty-two, embracing the deformities of the human frame, their cause, methods of correction and means of prevention. His first lecture, being an introductory of the subject, gives quite a full history of orthopedy, going as far back as 1685. His second lecture classifies the deformities, giving the etiology, prognosis and diagnosis. His third lecture embraces the treatment, on general principles, the value of manipulation or massage and gymnastics, including dry heat, baths, inunction and electricity. There are five lectures on Talipes and its various forms. Two lectures on diseases of the ankle joint. Four on the knee joint. Five on morbus coxarius. In all, making the most complete work on orthopœdic surgery in the English language.

GEO. P. ROWEL AND CO.'S AMERICRN NEWSPAPER DIRECTORY. Containing Accurate Lists of all the Newspapers and Periodicals Published in the United States, Territories, and the Dominion of Canada, Together with a Description of the Towns and cities in which they are Published. Fifteenth Annual Edition. 8vo. pp. 1124. (New York: Geo. P. Rowell & Co., Publishers, 1883.)

This is the most complete newspaper directory published in the United States, and more nearly correct than any other work of the kind. For advertisers it is invaluable. The towns and cities are located, the population is given, and the politics of each paper and the date of its establishment stated.

The work is neatly gotten up and printed in clear type with good ink. We notice, by the increased number of advertisments of newspapers and different publications, that it is gaining in favor each year.

THE DISPENSATORY OF THE UNITED STATES OF AMERICA. By DR. G. B. WOOD AND DR. FRANKLIN BACHE. Fifteenth Edition, Rearranged, thoroughly Rewritten. With Illustrations. By H. C. WOOD, M. D., and JOSEPH P. REMINGTON, Ph. G., and SAMUEL P. SADTLER, Ph. D. F. C. S. 8vo, pp. 1928. (Philadelphia: J. P. Lippincott & Co., 1883.) Price $8.00.

It is just fifty years since Dr. Wood published the first edition of the United States Dispensatory. Probably no work has achieved the success that this work has since its publication. The number of copies that have been sold of this work during its fourteen editions, are to be numbered by the hundreds of thous-

ands and wherever the English language is spoken, this work is found.

The progress of the last decade has necessitated changes in those sections that treat of pharmaceutical chemistry, while the pharmacy of the present edition is almost entirely new; this part of the revision has been performed by Prof. Remington. Some of the distinctive features of the edition are the indication of the pronunciation of the officinal titles by diacritical marks, to the complete list analysis of the American Mineral Springs, and to the illustrations. These with a few exceptions, are original. This revision has occupied the editors' spare moments during the last three years.

The International Encyclopædia of Surgery. A Systematic Treatise on the Theory and practice of Surgery, by authors of Various Nations, Edited by John Ashhurst, Jr., M. D. Illustrated with Cromo-Lithographs and Wood-Cuts. In six volumes. Vol. III., Royal 8vo., pp. 760. (New York: Wm. Wood & Co., 1883.)

This volume resumes the consideration of the injuries and diseases of the various tissues of the human body, containing separate articles on injuries and diseases of the muscles, tendons and fascia; on injuries and surgical diseases of the lymphatics; on injuries of bloodvessels; on surgical diseases of the vascular system; on aneurism; on injuries and diseases of the nerves and on injuries of the joints.

Lectures on Medical Nursing. Delivered in the Royal Infirmary, Glasgow, by J. Wallace Anderson, M. D, Second Edition, 16mo., pp. 224. (New York: McMillan & Co., 1883.)

This little work is put forth in the shape of lectures. After each lecture is printed a number of questions designed to be a review of what has passed. The questions are not exhaustive but intended as an outline of the method of giving instruction on medical nursing.

The work has many valuable suggestions in it and will no doubt become popular.

Books and Pamphlts Received.

Article XVIII.

Gout in its Protean Aspects. By J. Milner Fothergill, M. D. (Detroit, Mich.: Geo. S. Davis, Publisher, 1883.)

Lectures on Medical Nursing. Delivered in the Royal Infirmary, Glasgow. By J. Wallace Anderson, M. D., Second Edition. (New York: MacMillan & Co. St Louis: H. R. Hildreth, 1883.) Price $1,00.

The Practitioner's Ready Reference Book. A Handy Guide in Office and Bed-side Practice. By Richard J. Dungleson, A. M., M. D. Third Edition, thoroughly revised and enlarged. (Philadelphia: P. Blakiston, Son & Co., 1883.)

The International Encyclopædia of Surgery. A Systematic Treatise on the Theory and Practice of Surgery. By Authors of Various Nations. Edited by John Ashhurst, Jr., M. D. Illustrated with cromo-lithographs and wood-cuts, in six volumes. Vol. III. (New. York: Wm. Wood & Co. St. Louis: H. R. Hildreth & Co., 1883.)

April Number of Wood's Library. The Microscope and its Revelations. By William B. Carpenter, C. B., M. D., LL. D. etc. Sixth Edition, Illustrated by twenty-six plates and five hundred wood engravings. Vol. I. (New York: Wm. Wood & Co., 1883. St. Louis: H. R. Hildreth & Co.)

On the Pathology of Bronchitis, Catarrhal Pneumonia, Tubercle and Allied Lesions of the Human Lung. By D. J. Hamilton, M. B., F. R. C. S. E., F. R. S. E., with Illustrations. [Compliments of the Authors. (London: MacMillan & Co., 1883.)

An Open Letter to the American (coal) *Gas Light Journal*, Replying to the Editorial of March 16, 1883; "Carburetted Poison." (Philadelphia: Edward Patterson, Printers, 1883.)

Alcohol as a Food, a Medicine, a Poison and as a Luxury. By Geo. C. Pitzer, M. D. (St. Louis: Commercial Printing Co. 1883.)

A History of Health-Work in Indiana. By Thad. M. Stevens, M. D. (Reprinted from American Health Association Reports, 1883.)

Thirteenth Biennial Report of the Missouri School for the

Blind, to the Thirty-Second General Assembly for the years 1881 and 1882. (Jefferson City: State Journal Company, State Printers, 1883.)

A Year's Work in Ovariotomy. By Wm. Goodell, M. D., from *The Medical News*, April 14, 1883.

Homicide and Suicide, in the City and County of Philadelphia, Pa., during a decade, 1871 to 1881 inclusive. By John G. Lee, M. D. (Philadelphia: Times Printing House, 1883,

A Lecture Introductory to a Course on Aural Pathology. [Delivered in the Glasgow Royal Infirmary, 1877–78.] By James Patterson Cassells, M. D., M. R. C. S., Eng. (Reprinted from *The Glasgow Medical Journal*, Jan., 1883.)

Charges made by the Indiana State Board of Health against Thad. M. Stevens, M. D., Sec. of Board Together with answers to such charges. By Thad. M. Stevens, M. D. (Indianapolis: Sentinel Company Printers and Binders, 1883.)

Hydriodic Acid; its Chemical Character, History, Incompatible Condition, Doses, etc. Hypophosphites and Phosphates Chemically Compared. History of Three selected Typical cases of Phthisis, First Stages, Intermediate and Second Stage, Cured by Hypophosphites. (New York: McGowan & Slipper, Printers, 1883.)

A Lecture Introductory to a Course on Aural Diagnosis. By James Patterson Cassells, M. D. [Delivered in the Glasgow Hospital and Dispensary for the Diseases of the Ear, in 1882.] (Reprinted from *The Glasgow Medical Journal*, for April, 1883.)

Therapeutic Handbook of the United States Pharmacopœia. Being a Condensed Statement of the Physiological and toxic Action, Medicinal value, Methods of Administration and doses of the Drugs and Preparations in the latest Edition of the United States Pharmacopœia. [Apothecaries' and Metric System.] With some remarks on unofficinal preparations. By Robert T. Edes, A. B., M. D., (Harvard). (New York: Wm. Wood & Co., 1883. St. Louis: H. R. Hildreth & Co.)

The May Number of Wood's Library.—The Microscope and its Revelations. By Wm. B. Carpenter, C. B., M. D., etc. Sixth Edition. Illustrated by 26 plates and 500 wood engravings, Vol. II. (New York: Wm. Wood & Co. St. Louis: H. R. Hildreth & Co., 1883.)

June Number of Wood's Library.—Handbook of Electro-Therapeutics. By Dr. William Erb. Translated by L. Putzel, M. D. With thirty-nine wood cuts. (New York: Wm. Wood & Co. St. Louis: H. R. Hildreth & Co., 1883.)

Medical Essays, 1842–1882. By Oliver Wendell Holmes. Boston: Houghton, Mifflin & Co. New York: East Seventeenth St. The Riverside Press, Cambridge. St. Louis: H. R. Hildreth & Co., 1883.) Price $2.00.

Twenty-Fifth Annual Announcement of the Chicago Medical College, Session 1883–84, Chicago, 1883.

An Epl.emeris of Materia Medica, Pharmacy, Therapeutics and Collateral Information, May 1st, 1883. By E. R. Squibb, M. D., E. H. Squibb, S. B., M. D., C. F. Squibb, A. B., Brooklyn, N. Y., 1883.

The Clinical History and exact localization of Perinephritic Abscesses. By John B. Roberts, M. D., Phila., Pa. From the *American Journal of the Medical Sciences*, April, 1883.

Heart Puncture and Heart Suture as Therapeutic Proceedures. By John B. Roberts, M. D., of Phila., Pa. Reprint from the *Medical News*, Jan. 13, 1883.

The Simulation of Insanity by the Insane. By C. H. Hughes, M. D., St. Louis. Reprint from the *Alienist and Neurologist*, July, 1883.

Otitis Media Purulenta. By Dudley S. Reynolds, M. D., Louisville, Ky. Reprint from the *Phila. Med. and Surg. Rep.*, Oct. 21, 1882.

The Second Annual Announcement and Catalogue of the Woman's Medical College of Baltimore, Session 1883–84, Baltimore, 1883.

Proceedings of the Eighth Annual Session of the Southern Illinois Medical Association, held at Sparta, Ill., May 9th and 10th, 1883.

How can we Obtain and Preserve the Best Eyesight and Hearing? A paper read before the Sanitary Convention at Greenville, April 11, 1882. By Leartus Conner, A. M., M. D., of Detroit, Mich. Reprint from the Annual Report of the Michigan State Board of Health, for the year 1882.

A Clinical study of Syphilis of the Eye and its Appendages. By Leartus Conner, A. M., M. D., of Detroit, Mich. Reprint from the *American Journal of the Medical Sciences*, April, 1883.

Thirty-Seventh Annual Announcement of the Starling Medical College, Columbus, O.

News Items.

Article XIX.

A PROPOSITION TO REVISE THE CODE OF MEDICAL ETHICS.

The following are the preamble and resolutions offered by Dr. S. Pollak, of St. Louis, member of the St. Louis Medical Society, at the meeting of the American Medical Association, in Cleveland on the 7th of June:

A code of ethics is considered essential for such an organization as the American Medical Association, and is equal in importance to the written law of a community. Associations and committees can only be ruled by laws which are made for themselves and by themselves. But the best laws become oppressive when the conditions are changed which called for their enactment.

A revision and change of such laws becomes then imperative, as is so frequently instanced by the changes of the Constitution of the United States, and of that of every State in the Union. Municipal and corporation charters are changed by the will of the goverened, who delegate that power to their representatives.

The code of ethics has an existence coevil with the organization of the American Medical Association.

It was absolutely necessary then, and it cannot be entirely dispensed with now. But in thirty-four years this country has presented so many phases in its development and progress that new laws are being constantly enacted, and old laws are repealed or modified, to suit the requirements of the time.

The Code has accomplished all it was desired it should, but at present many of its features are obsolete, and not adapted to our wants. The necessity of an early revision is very apparent, is loudly called for in all parts of our land, and cannot be repressed much longer. The American Medical Association alone has the right and the power to order a revision; all other medical organizations in affiliation with it can only respectfully ask for it. The time has come when the loud and very soon universal call should be heeded. The excitement and the evil consequences of a schism can be easily averted now, and harmony and fraternal feeling may once more be restored among the members of the medical profession. Therefore,

Resolved, 1. That the American Medical Association be

respectfully requested to appoint a committee of one member from each State for the purpose of taking into consideration the propriety and advisability of a revision of the code of ethics, and to report thereon at the meeting in 1884.

Resolved, 2. That the committee be authorized to prepare a code of ethics which in their view will meet the wishes of the profession, and submit the same to the meeting of 1884.

TO THE EDITOR:

Dear Sir:—I have been instructed by the St. Louis Medical Society to request you to publish the following; by doing so you will oblige Yours Respectfully,

A. H. OHMANN-DUMESNIL, M. D., Rec. Sec.

On June 23d, 1883, Dr. Atwood introduced the following which was adopted by the St. Louis Medical Society, after some considerable discussion:

WHEREAS, At the recent session of the American Medical Association, a preamble and resolution were offered for the consideration of said Association, purporting to represent the sense of the St. Louis Medical Society upon the propriety of preparing a new code of ethics, or altering and changing the existing code over its present relations of the profession and

WHEREAS, In said preamble the assertion is made that, "the Code has accomplished all it was designed it should, but at present many of its features are obsolete and not adapted to our wants. The necessity of an early revision is very apparent, is loudly called for in all parts of our land, and cannot be repressed much longer. * * * The time has come when the loud and very soon universal call will have to be heeded."

WHEREAS, The St. Louis Medical Society did not instruct, "That the Committee be authorized to prepare a code of ethics which in their view will meet the wishes of the profession, and submit the same to the meeting of 1884."

Resolved, That the St. Louis Medical Society distinctly repudiates the statements contained in said preamble and again expresses its fealty to the existing code of ethics as a time honored and most suitable fundamental law of the profession, and specially depreciate any action calculated to reflect upon its loyalty to those principles which have heretofore secured immunity from the machinations of schismatics within or enemies without.

A. H. OHMANN-DUMESNIL, M. D., Rec. Sec.

WM. R. WARNER & CO.'S

SOLUBLE and PERMANENT

SUGAR-COATED PILLS.

PIL.
ANALEPTIC.
(WARNER & CO.)

℞ Pv. Antimonialis . . . . gr. LXXV.
Pv. Res. Guaiaci . . . . gr. C.
Pv. Aloes Soc. . . . . gr. LXXV.
Pv. Myrrh . . . . . gr. L.
M—fiat pilulæ, No. C.

DOSE.—1 to 4 Pills.

PRICE PER 100, 60 CTS.

PIL.
ANODYNE
(WARNER & CO.)

℞ Pv. Camphoræ . . . . . gr. C.
Morphiæ Acetas . . . . . gr. V.
Ext. Hyoscyami . . . . . gr. C.
Ol. Res. Cæsici . . . . gtt. V.
M—fiat pilulæ, No. C.

DOSE.—1 to 2 Pills.

PRICE PER 100, 75 CTS.

PIL.
ANTICHLOROTIC.
(WARNER & CO.)

℞ Potass. Chlor. . . . . gr. C.
Ferri Chlor. . . . . gr. L.
Pv. Podophylli . . . . . gr. C.
Pv. Myrrhæ . . . . . gr. L.
M—fiat pilulæ, No. C.

DOSE.—1 to 2 Pills.

PRICE PER 100, 75 CTS.

PIL.
ANTISPASMODIC.
(WARNER & CO.)

℞ Ext. Hyoscyami . . . . . gr. L.
Morphiæ Acetas . . . . . gr. X.
Brom. Camphor . . . . . gr. L.
Pv. Capsici . . . . . gr. L.
M—fiat pilulæ, No. C.

DOSE.—1 to 2 Pills.

PRICE PER 100, 75 CTS.

PIL.
ANTIPERIODIC
(WARNER & CO.)

℞ Cinchonidiæ Sulph. . . . . gr. C.
Res. Podophylli . . . . . gr. V.
Strychniæ Sul. . . . . gr. III.
Gelsemin . . . . . gr. V.
Ferri Sulph. Exs. . . . . gr. L.
Ol. Res. Capsici . . . . . gtt. X.
M—fiat pilulæ, No. C.

DOSE.—1 to 3 Pills.

PRICE PER 100, 80 CTS.

PIL.
ANTISPLENETIC.
(WARNER & CO.)

℞ Pv. Aloes Soc. . . . . gr. C.
Pv. Asafœtidæ . . . . . gr. C.
Pv. Myrrhæ aa . . . . . gr. L.
Ext. Erythræ . . . . . gr. C.
M—fiat pilulæ, No. C.

DOSE.—2 to 4 Pills.

PRICE PER 100, 60 CTS.

PIL.
ASTRINGENS.
(WARNER & CO.)

℞ Ext. Geranii . . . . . gr. CC.
Pv. Opii . . . . . gr. XXV.
Ol. Menth. Pip. . . . . gtt. V.
Ol. Res. Zingiber, aa . . . gtt. V.
M—fiat pilulæ, No. C.

DOSE.—1 to 2 Pills.

PRICE PER 100, 60 CTS.

PIL.
CATHARTIC
(CHOLAGOGUE.)
(WARNER & CO.)

℞ Res. Podophylli . . . . . gr. L.
Pil. Hydrarg. . . . . gr. XXV.
Ext. Hyoscyami . . . . . gr. XII.
Ext. Nuc. Vom. . . . . gr. VI.
Ol. Res. Capsici . . . . . gtt. XII.
M—fiat pilulæ, No. C.

DOSE.—1 to 4 Pills.

PRICE PER 100, 60 CTS.

PIL.
ECCOPROTIC.
(WARNER & CO.)

℞ Ext. Aloes Soc. . . . . gr. CC.
Ext. Nuc. Vomicæ . . . . gr. XX.
Res. Podophylli . . . . . gr. XXX.
Ol. Caryophyll . . . . . gtt. X.
M—fiat pilulæ, No. C.

DOSE.—2 to 4 Pills.

PRICE PER 100, 60 CTS.

PIL.
SEDATIVA
(WARNER & CO.)

℞ Ext. Sumbul . . . . . .
Ext. Valerianæ . . . . . .
Ext. Hyoscyami aa . . . . gr. L.
Ext. Cannab. Ind. . . . . gr. X.
M—fiat pilulæ, No. C.

DOSE.—1 to 2 Pills.

PRICE PER 100, 75 CTS.

PIL.
LAXATIVA
(WARNER & CO.)

℞ Pv. Aloes Soc. . . . . gr. C.
Sulphur . . . . . gr. XX.
Res. Podophylli . . . . . gr. XX.
Res. Gualaci . . . . . gr. L.
Syr. Rhamni . . . . . q. s.
M—fiat pilulæ, No. C.

DOSE.—1 to 2 Pills.

PRICE PER 100, 60 CTS.

PIL.
TONIC
(WARNER & CO.)

℞ Ext. Gentianæ . . . . . gr. C.
Ext. Humuli . . . . . gr. L.
Ferri Carb. Sacch. . . . . gr. XXV.
Ext. Nuc. Vomicæ . . . . gr. V.
Res. Podophylli . . . . . gr. IV.
Ol. Res. Zingiber . . . . . gtt. X.
M—fiat pilulæ, No. C.

DOSE.—1 to 2 Pills.

PRICE PER 100, 60 CTS.

PILLS SENT BY MAIL ON RECEIPT OF PRICE.

WM. R. WARNER & CO.

Manufacturing Chemists,

1228 MARKET STREET, PHILADELPHIA.

Dr. Wadsworth's Uterine Elevator.

The most simple and practical of any stem pessary ever invented; made of India rubber *without lead*, unirritating, of easy application, and unfailingly keeps the womb in its natural position. The first-class physicians in Providence, and eminent practitioners in almost every State, highly recommend it. A pamphlet describing it, and testimonials of distinguished physicians; also Price List sent on application.

Price to Physicians $4.50.

H. H. BURRINGTON, Sole Proprietor, Providence, R. I.

Beware of imitations sold on the great reputation of the above

For Sale by A. M. Leslie & Co., and Aloe & Hernstein, St. Louis, Mo.

☞Also by dealears in Surgical Instruments generally.

PEPTODYN.

The New Digestive is a combination of whole digestive secretions—Pepsine, Pancreatine, Diastase, Etc.,

Forming an invaluable remedy in the treatment of all forms of Dyspepsia, and all diseases arising from imperfect digestion.

N. B.—*The success of this remedy has led to several imitations of it*, which consist largely of Milk Sugar, and as compared with PEPTODYN, are of little or no real value as digestive agents.

SAVORY & MOORE, 143 NEW BOND STREET, LONDON.

Agents for America—E. FOUGERA & CO., New York.

PEPSIN.

E. SCHEFFER, Louisville, Ky.,

MANUFACTURES BY HIS IMPROVED METHOD

SACCARATED PEPSIN, which has proven its superiority over other Pepsins by its stability, uniformity and agreeable taste. In digestive power it corresponds to the standard adopted by the Committee on the 6th Revision of the U. S. Pharmacopœia which is as follows:

One part dissolved in 500 parts of water, acidulated with 7.5 parts of hydrochloric acid, should digest at least 50 parts of hard-boiled Egg Albumen in 5 to 6 hours at 100° to 104° F.

DRY PEPSIN CONCENTRATED, particularly recommended to manufacturers, possesses 8 times the strength of the above.

PREMIUMS were awarded to the above preparations at the international Exhibition Vienna, in 1873, and the Centennial Exposition in Philadelphia.

MAN'S PEPTONIZED BEEF TONIC.

The great necessity for a fluid food that would possess *all the elements necessary for the support of the system* having long been felt by the Medical Profession, we call attention to this preparation, containing the *entire nutritious properties* of the muscular fiber, blood, bone and brain of a healthy bullock, dissolved by aid of heat and pepsin, and preserved by spirit; thus constituting a perfect nutritive, reconstructive tonic.

It is not a mere stimulant, like the now fashionable extracts of beef, but contains blood-making, force-generating, and life-sustaining properties, pre-eminently calculated to support the system under the exhausting and wasting process of fevers and other acute diseases, and to rebuild and recruit the tissues and forces, whether lost in the destructive march of such affections, or induced by overwork, general debility, or the more tedious forms of chronic disease. It is friendly and helpful to the most delicate stomach, and where there is a fair remnant to build on, will reconstruct the most shattered and enfeebled constitution. It is entirely free from any drugs. Dispensed in 16 oz. and 12 oz. bottles.

"DR. MENSMAN'S BEEF TONIC

Is a complete representative of lean and fat beef, bone, blood and muscle. It consists of all the properties which combine in the development of the animal body, which are liquefied by an artificial process, simulating natural digestion, and retaining all of their alimentary values. It contains in their perfection all the natural elements of the meat in their natural quantitative relations, without their extraneous or indigestible properties, and therefore requiring the least possible effort on the part of the stomach for its conversion into chyle, and its immediate absorption by the system.

"This tonic is free from any drugs or chemicals, and is a great invigorator or recuperant. I have used this preparation in several cases of sickness of a character which enables me to give the most favorable opinion of its great value, in extreme sickness. Some of the cases referred to are hemorrhage of the bowels, typhoid fever, bilious fever, inflammation of the bowels, where the greatest possible prostration was present, and in which I found this meat tonic to accomplish results I could not obtain with any other preparation. It is a gentle stimulant, and allays the peculiar irritation of the stomach, which destroys the appetite in all forms of disease, when the tone of the stomach is destroyed."

"We published the above article in the November No. of 1877, and will say that we have prescribed the tonic daily to date with the very best results."—ED. MED. ECLECTIC.

THE BEST TONICS OF THE PHARMACOPŒIA:

Iron, Phosphorus and Calisaya.

We call the attention of the Profession to our preparation of the above estimable Tonics, as combined in our elegant and palatable **Ferro-Phosphorated Elixir of Calisaya Bark**, a combination of the Pyrophosphate of Iron and Calisaya never before attained, in which the nauseous inkiness of the Iron and astringency of the Calisaya are overcome, without any injury to their active tonic principles, and blended into a beautiful amber colored Cordial, delicious to the taste and acceptable to the most delicate stomach. This preparation is made directly from the **ROYAL CALISAYA BARK**, not from **ITS ALKALOIDS OR THEIR SALTS**—being unlike other preparations called "Elixir of Calisaya and Iron," which are simply an **Elixir of Quinine and Iron.** Our Elixir can be depended upon as being a true Elixir of Calisaya Bark with Iron. Each teaspoonful contains seven and a half grains Royal Calisaya Bark and two grains Pyrophosphate of Iron.

PURE COD LIVER OIL.

Manufactured on the Sea-Shore from Fresh and Selected Livers.

The universal demand for Cod Liver Oil that can be depended upon as strictly pure and scientifically prepared, having been long felt by the Medical Profession, we were induced to undertake its manufacture at the Fishing Stations where the fish are brought to land every few hours, and the Livers consequently are in great perfection.

This Oil is manufactured by us on the sea-shore, with the greatest care, from fresh, healthy Livers, of the Cod only, without the aid of any chemicals, by the simplest possible process and lowest temperature by which the Oil can be separated from the cells of the Livers. It is nearly devoid of color, odor, and flavor—having a bland fish-like, and to most persons, not unpleasant taste. It is so sweet and pure that it can be retained by the stomach when other kinds fail, and patients soon become fond of it.

The secret of making good Cod Liver Oil lies in the proper application of the proper degree of heat; too much or too little will seriously injure the quality. Great attention to cleanliness is absolutely necessary to produce a sweet Cod Liver Oil. The rancid Oil found in the market is the make of manufacturers who are careless about these matters.

Prof. Parker, of New York, says "I have tried almost every other manufacturer's Oil, and give yours the decided preference."

Prof. Hays, State Assayer of Massachusetts, after a full analysis of it, says: "It is the best for foreign or domestic use."

After years of experimenting, the Medical Profession of Europe and America, who have studied the effects of different Cod Liver Oils, have unanimously decided the light straw-colored Cod Liver Oil to be far superior to any of the brown Oils.

SURGICAL INSTRUMENT DEPARTMENT,

Under the direction and personal supervision of W. D. FORD, Instrument Maker to St. Luke's, Mt. Sinai, New York State Women's Hospitals, Bellevue and all other New York Hospitals.

MANUFACTURERS, IMPORTERS, WHOLESALE AND RETAIL DEALERS IN

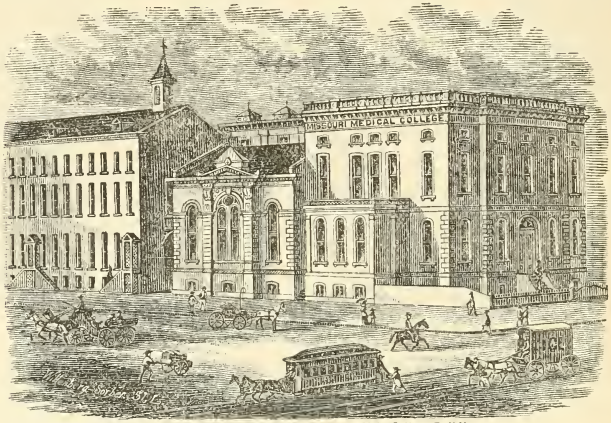
Surgical, Dental, Orthopædic Instruments, Catheters, Trusses, Supporters, Silk Stockings, Ear Trumpets, Splints, Anatomical Preparations, Local Anæsthesia Apparatus, Laryngoscopes, Ophthalmoscopes, Hypodermic Syringes, Axilla Thermometers, etc., etc.

☞Special attention given to the manufacture of Instruments to *order*, in exact accordance with patterns furnished by Surgeons and Physicians.

CASWELL, HAZARD & CO.,

Family and Manufacturing Chemists, New York.

MISSOURI MEDICAL COLLEGE



St. John's Hospital. New Clinical Amphitheatre. Main College Building.

ST. LOUIS, MO.

CORNER TWENTY-THIRD STREET AND LUCAS AVENUE.

The Forty-third Regular Session of this Institution will begin October 1st, 1883, and continues five months.

FACULTY:

WM. M. McPHEETERS, M. D.,
Emeritus Professor of Materia Medica and Therapeutics.

JOHN S. MOORE, M. D.,
Professor of Principles of Medicine and Hygiene.

G. M. B. MAUGHS, M. D.,
Professor of Obstetrics and Diseases of Women.

P. GERVAIS ROBINSON, M. D.,
Professor of Practice of Medicine and Clinical Medicine.

J. K. BAUDUY, M. D., LL.D.,
Professor of Psychological Medicine, Diseases of Nervous System, and Medical Jurisprudence.

CHARLES E. MICHEL, M. D.
Professor of Ophthalmology, Histology and Pathological Anatomy.

H. TUHOLSKE, M. D.,
Professor of Clinical Surgery and Surgical Pathology.

OTTO A. WALL, M. D., PH. G.,
Professor of Materia Medica, Therapeutics and Pharmacy.

C. A. TODD, M. D.,
Professor of Anatomy and Diseases of the Ear and Throat.

J. P. KINGSLEY, M. D., SEC'Y,
Professor of Physiology and Clinical Professor of Diseases of Children.

T. F. PREWITT, M. D., DEAN,
Professor of Principles and Practice of Surgery and Clinical Surgery.

C. O. CURTMAN, M. D.,
Professor of Chemistry.

P. V. SCHENCK, M. D.,
Clinical Lecturer on Gynæcology.

C. A. TODD, M. D.,
Demonstrator of Anatomy and Curator of Museum.

JUSTIN STEER, M. D.,
Assistant Demonstrator.

FEES:

For first two Courses of Lectures, each	$60 00
Matriculation Fee. (Good until the following March)	5 00
Admission to Dissecting Room. (*Material plenty and at cost*)	10 00
Practical Laboratory Course (optional)	10 00
Examination for Degree	30 00
Hospital Tickets	FREE.
Third, and all subsequent Courses	FREE.

No Fee charged for Graduation or Diploma.

☞For the Annual Circular and Catalogue, address,

T. F. PREWITT, M. D., Dean.

DO YOU ADVERTISE?

Do you wish to advertise to the amount of a few dollars only? Apply to us and we will inform you how you can invest the amount most judiciously.

WE WILL TELL YOU HOW.

If you wish advice or information on the subject, we shall be glad to communicate with you and endeavor to give you satisfaction.

YOU CAN SAVE MONEY,

Do you wish to advertise extensively? Send a concise statement of what you wish to do, and await our estimation before giving out the order.

TIME,

Have you a list of papers in which you find it pays you well to advertise? Send your list and advertisement to us. By so doing, you can save expense, time, and the trouble of attending to the business.

ANNOYANCE,

Does it give you trouble to look after the advertising in each particular paper? Let us do your business and we will examine every paper, and see that every insertion is properly given and all omissions made good.

AND HAVE YOUR WORK DONE

Is your credit so well established that you can secure very low rates by trading direct with publishers? If so, we want your business and will procure you equally low rates.

CHEAPER,

If you do much or little, we shall be glad to do it for you, and give you every advantage which our experience of seventeen years enables us to offer.

BETTER,

Do you find it difficult to get exactly what you want? Write us in detail just what you require and see if we do not give you satisfaction.

AND MORE PROMPTLY,

Are you annoyed by needless delays? We promise you they shall not occur if you trade with us. We always send out all orders and check all papers the day they are received.

BY SENDING YOUR ORDERS TO

If you want the most expensive advertising, we can give you the papers to do it in. If you want the cheapest, we can do the same and in either case it will pay you to write to us.

GEO. P. ROWELL & CO.,

If you live here or come to our city, we shall be glad to have you call at our offices, whether you are ready to advertise or not.

NEWSPAPER ADVERTISING BUREAU,

We have an entire building of our own; we keep all the newspapers on file and shall take pleasure in showing you how we do our work. If you can't come, write for our circular and catalogue, which will be sent free.

NO. 10 SPRUCE ST., NEW YORK.

PARIS, 1867.

Prize Medal.

1868.

Silver Medal.

1873.

Gold Medal.

Boudault's Pepsine

And Wine, Elixir, Syrup, Pills and Lozenges of Pepsine.

Since the introduction of Pepsine by Boudault in 1854, **Boudault's Pepsine has been and is still considered the most reliable,** as is attested by the awards it has received at the Exhibitions of 1867, 1868, 1872, 1873, and *in 1876 at the Centennial Exposition at Philadelphia.* Careful tests will enable any one to satisfy himself that *Boudault's Pepsine has a digestive power at least double* that of the best Pepsines in the market, and that it is really the cheapest.

VIENNA, 1873.

Medal of Merit.

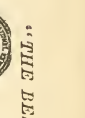
It is sold in 1 oz., 8 oz., and 16 oz. bottles. Beware of so-called French Pepsines bearing fictitious names. Ask for and take only **Boudault's.**

PHILA. 1876.

Medal of Merit.

E. FOUGERA & CO., New York, Agents.

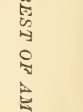
"THE BEST OF AMERICAN MANUFACTURE."



PLANTEN'S CAPSULES,

Known as Reliable nearly 50 Years

For "General Excellence in Manufacture."



H. PLANTEN & SON,

224 William Street, New York.

* See note p. 64, Prof. VAN BUREN & KEYES on Urinary Organs.

HARD and SOFT CAPSULES

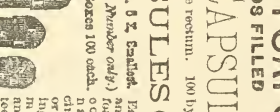
OF ALL KINDS FILLED

RECTAL Suppository CAPSULES

For administering medication in the rectum. 100 by mail, 70 cents.

EMPTY CAPSULES (7 SIZES.)

No. 00. Largest. No. 5 0. Smallest. Especially adapted and recommended *(Order by Number only)* for administering concentrated or nauseous medicines free from taste or smell. Preventing irritation of mouth or throat, or injury to the teeth. Liquor to Dozen by mail, 50c.



SAMPLES SENT FREE. SOLD BY ALL DRUGGISTS.

Specify "PLANTEN'S CAPSULES" on All Orders.

We have, also, Capsules adapted for giving medicines to Horses, Cattle, 2 sizes (Ounce and Half-Ounce), for liquids or solids.

VAGINAL & CAPSULES for Mechanical Purposes.

N. B.—We make **ALL KINDS** of Capsules to order, and of any size required. New Articles, and Private Formulas a specialty.

Grimault & Co's Pharmaceutical Products.

Prepared with scrupulous care under the immediate supervision of a practical chemist, at their model laboratory at Neuilly, near Paris.

Offices and Salesrooms, No. 8 Rue Vivienne, Paris.

The attention of the medical profession is directed to a few leading products:

CHAPOTEAU'T'S PEPSICAL PEPTONES.

These Peptones, prepared with great care, contain only beef digested and rendered assimilable by a *Pepsin*, always titrated and regular, extracted from the stomach of the sheep, digesting 7 to 800 times its weight of fibrine, and which cannot be found in commerce. They possess a great alimentary power, and give to the digestive organs, an intense nutritive action. These preparations come under three forms:

1st, CHAPOTEAUT'S PEPSICAL PEPTONE POWDER This has only the taste of meat, and offers the advantage of being able to be taken with the first spoon of soup. It is soluble in water, bouillon or wine. Each teaspoonful represents about 4 grains of Peptone, or 21 to 22 grains of Beef, entirely digested and assimilable.

2d, CHAPOTEAUT'S PEPSICAL PEPTONE CONSERVE. This article is a liquid, neutral-aromatic, and keeps well. Each teaspoonful represents double its weight of beef, and is taken either pure or in soup, wine, jellies or syrup, and also in the form of alimentary injections.

3d, CHAPEAUT'S PEPSICAL PEPTONE WINE. Each small wine-glass contains the Pepsical Peptone of 10 grains of beef. It has a very agreeable taste, and constitutes an excellent aliment, which the patient accepts with pleasure. It is taken at the beginning of meals, in doses of one or two small wine glasses.

MIDY'S ESSENCE OF SANDAL.

The Essence of Sandal is used with success in place of Copaiba and Cubebs. It is inoffensive, even when taken in large doses. Its use does not occasion any indigestion or diarrhœa. The Sandal Midy is chemically pure, and is only sold in the form of Capsules.

IODIZED SYRUP OF HORSE RADISH.

The Syrup of Iodized Syrup of Horse Radish is used in France, on a large scale, as a substitute for Cod Liver Oil. It is prepared from juices of anti-scorbutic plants. Each tablespoonful contains one grain of Iodide so intimately combined as to be insensible to the action of starch.

Dusart's Syrup and Wine of Lacto-Phosphate of Lime.

The properties of which are scientifically founded on physiological experiments, and have received the sanction of several years' successful trial by the French and English medical profession, as producing durable reconstituent effects in all cases of *Cachexia* or *Adynamia*, when nutrition has been impaired by acute or chronic complaints

As an article of diet it acts as a general excitant of all the nutritive functions, ensures digestion, brings back or increases the appetite, enriches the milk of the mother, and generally improves the vital energies. As a medicament it is chiefly used in convalescence, teething, rickets, and imperfect growth, dyspepsia, various nervous diseases, wounds, fractures, and all complaints of the osseous system.

Dusart's Syrup of Lacto-Phosphate of Lime and Iron is a furruginous medicament specially invaluable for the above cases, when complicated with anæmia.

Dusart's work on the "Physiological and Therapeutic Action of Phosphate of Lime," will be sent free to any physician on application to Messrs. E. Fougera & Co.

GRIMAULT & CO.'S MATICO CAPSULES.

These Capsules are coated with Gluten, and contain the essential Oil of Matico, combined with the Balsam of Copaiba, solidified by Calcined Magnesia. Besides its very special activity, the Essence of Matico has the property of disinfecting the Balsam of Copaiba and of making it endured by the stomach, and does not cause any unpleasant eructations.

LEBAICUE'S DIALYZED IRON, or pure Peroxide of Iron,

IN SOLUTION WITHOUT THE AID OF ACIDS OR OTHER SOLVENTS.

It is nearly tasteless; does not blacken the teeth; is very readily absorbed; will not constipate, or cause any disturbance of the digestive apparatus, and is tolerated by persons who could not support any other preparation of Iron. It is offered in the form of *Solution*, which is generally preferred; or of an *Elixir*, when a slight stimulant is desired.

The above and all other preparations of Messrs GRIMAULT & CO., and information in regard to the same may be obtained at all times from Messrs E. FOUGERA & CO., Agents, New York.

RIDGE'S FOOD

FOR INFANTS AND INVALIDS.

MANUFACTURED BY

Woolrich & Co.,

PALMER MASSACHUSETTS.

This preparation, from the formula of a well-known English Physician, has enjoyed a wide and increasing popularity in England and the British Colonies for nearly thirty year. After a competitive examination in London it was awarded the first rank amongst Cereal foods, in respect of its "guaranteed parity, palatability, bone, flesh and fat-forming qualities." Since its introduction into the United States it has likewise won the highest commendations from Physicians, Managers of Public Institutions, and others who have made trial of its merits; and it is to the discriminating judgment of the medical profession that RIDGE'S FOOD owes its large and increasing patronage on both sides of the Atlantic. This enviable reputation the proprietors are resolved to maintain by vigilant care in the selection of material, and over every process of manufacture.

In common with all products which have obtained an eminent popularity, RIDGE'S FOOD has been subjected to the severest criticisms which envious rivalry could dictate. Science has been invoked to disprove on *a priori* grounds the positive conclusions of experience. Amongst other objections it has been urged that cereal food containing any portion of its starch unconverted must needs be indigestible by infants, because of the absence of *Ptyaline* from their saliva. The objectors, however, seem to be unaware that Bouchardat and Sandras have demonstrated that the corpuscles of raw starch which remain untransformed in their passage through the stomachs of animals, owing to imperfect action of their saliva, are *eroded, dissolved and transformed into sugar by the pancreatic fluid in the intestine.* So that the testimony authorities of such as DR. Mead Licentiate of the London College of Physicians, that he has found RIDGE'S FOOD a "very valuable preparation, especially in cases where the digestive powers are unusually feeble," and that of an old and reputable firm of druggists in Chicago, who say, "Its soothing and satisfying properties are so marked as often cause customers to inquire if it does not contain some opiate," may be accepted without demur.

It is Claimed for This PREPARATION

FIRST.

That it retains the nitrogenous elements and the phosphates in which wheat is so rich, including a metamorphic nitrogenous substance called by a French chemist "cerealine," which acts as a ferment.

SECOND.

That those element are presented in a form which is easy of digestion, and yields abundant nourishment.

THIRD.

That when prepared (as in some cases it must be) with water alone it is acceptable to the most irritable stomach. and is sufficient to sustain life.

FOURTH.

That it is the best daily food for infants and young children, especially for those who are growing rapidly, and makes a bland and nutritious gruel for a nursing woman.

Physicians, as yet unacquainted with RIDGE'S FOOD, will confer a favor on the manufacturers by writing for a sample for the purpose of testing its merits.

PLEASE SEND FOR PAMPHLETS.

TO PHYSICIANS.

BROMIDIA! BROMIDIA! BROMIDIA!

Formula.—Every *fluid drachm* contains 15 grs. EACH of pure Brom. Potas. and *purified* Chloral, and one-eight gr. EACH of *gen. imp. ext.* Cannabis Ind. and Hyoscyam.

Dose.—*One-half* to *one fluid drachm* in WATER or SYRUP every hour until sleep is produced.

BROMIDIA is *the* Hypnotic *par excellence*. It produces refreshing sleep, and is *exceedingly* valuable in sleeplessness, nervousness, neuralgia, headache, convulsions, colics, etc, and will relieve when *opiates fail*. *Unlike* preparations of opium, *it does not lock up the secretions*. In the restlessness and delierium of Fevers *it is absolutely invaluable*.

F. H. DAVENPORT, M. D., Boston, Mass.
Ass't in Gynæcology, Harvard Univ. Med. Dept.

J. R. BAUDUY, A. M., M. D., LL. D., St. Louis, Mo.
Prof. Nervous and Mental Diseases, Missouri Medical College.

L. CH. BOISLINIERE, M. D., LL. D., St. Louis, Mo.
Prof. of Obstetrics and Diseases of Women, St. Louis Medical College.

J. S. JEWELL, A. M., M. D., Chicago, Ill.
Ed. "Journal of Mental and Nervous Diseases," and Prof. Nervous and Mental Diseases, Chicago Medical College.

H. M. LYMAN, A. M., M. D., Chicago, Ill.
Prof. Physiology and Diseases of the Nervous System, Rush Medical College.

D. R. BROWER, M. D., Chicago, Ill.
Ed. "Chicago Medical Journal and Examiner," and Prof. Nervous and Mental Diseases, etc., Woman's Medical College.

I. N. DANFORTH, M. D., Chicago, Ill.
Prof. Pathology and Diseases of the Kidneys, Woman's Hospital Medical College; President and Lecturer on Pathology, Spring Faculty, Rush Medical College.

D. D. BRAMBLE, M. D., Cincinnati, O.
Dean; Prof. of Principles and Practice Surgery and Clinical Surgery, Cincinnati College Medicine and Surgery.

WM. CLENDENIN, M. D., Cincinnati, O.
Prof. Descriptive and Surgical Anatomy, Miami Medical College.

J. H. McINTYRE, A. M., M. D., St. Louis.
Prof. Gynæcology, College for Med. Practitioners.

W. B. FLETCHER, M. D., Indianapolis, Ind.
Prof. Physiology, Higiene and Clinical Medicine, Medical College of Indiana.

W. J. SCOTT, M. D., Cleveland, O.
Prof. Principles and Practice of Medicine, Medical Department Wooster University

H. H. POWELL, M. D., Cleveland, O.
Prof. Obstetrics and Diseases of Children, Cleveland Medical College.

A. A. SMITH, M. D., N. Y.
Prof. of Mat. Med. and Therapeutics and Clinical Medicine, Belleveu Hospital Med. College.

H. O. MARCY, A. M., M. D., Boston.
President of the American Academy of Medicine.

BATTLE & COMPANY, Chemists, St. Louis Mo.

PAPINE.

The Anodyne Principle of Opium.

—:o:—

PAPINE is the *Anodyne or Pain-Relieving* Principle of Opium in a pleasant liquid form. Its advantages are: That it produces *the good effects* of Opium without the disagreeable tendency to cause nausea, vomiting, etc. It is the *safest* and *most pleasant* of all the preparations of Opium, and is uniform in strength. It can be relied upon in all cases where Opium or Morphia are *indicated*.

ONE FLUID drachm represents one grain of Opium in Anodyne Power.

AVERAGE DOSE, one-half to one teaspoonful.

PREPARED EXCLUSIVELY FOR PHYSICIANS' PRESCRIPTIONS.

BATTLE & COMPANY, Chemists, St. Louis, Mo.

To Show the Value of Nutrition in Developing Life and Curing Chronic Diseases,

THE MURDOCK LIQUID FOOD CO., BOSTON,
HAVE ESTABLISHED A

FREE HOSPITAL OF SEVENTY BEDS.

Forty Beds for Diseased and Orphan Infants from the North End Mission District.

TREATMENT AND FOOD.

Murdock's Liquid Food with Oat or Barley Gruel of the density of milk. To each wineglass add one-quarter to one-half teaspoonful Liquid Food.

Not a case of Cholera Infantum known during the last three years where Liquid Food has been used. Nor a death of Cholora infantum when prescribed by a physician.

The ablest writers on Cholera-Infantum recognize it now as milk poisoning, showing the cause of the great mortality in infants brought up by hand.

This is confirmed by results at a leeding Nursery Hospital. We extract from their last report: "Of the twenty-seven bottle-babies twenty-four died during the year."

THIRTY BEDS FOR WOMEN WITH CHRONIC DISEASES.

Treatment Murdock's Liquid Food and Common Food.

Any physician that has a worthy case that will not yield to treatment can have a bed assigned if any are vacant.

Any physician can visit our Hospital from 10 A. M. to 6 P. M., daily, by applying at our office

Patients can receive any clergyman they may prefer. Our attending physicians are members of the Massachusetts and Suffolk County Medical Societies.

Monthly reports will be published of the condition of all patients. For any physician that has not tried our Liquid Food, we will deliver a six-oz. bottle to the Express in Boston free. Or, by mail, essays from medical societies and testimonials from hospitals and physicians of chronic cases treated with Liquid Food. Liquid Food is Beef, Mutton, and Fruits, raw, condensed many fold, and free of insoluble matter. It can be retained by the stomach when so weak as to resuse water, furnishing nutrition without the labor of digestion, making blood faster than all preparations known. It is the only food that will relieve the consumptive from hunger. Ask your druggisst for Essays and Testimonials from Medical Societies, Hospitals and Physicians. 1 oz., 15 cts.; 6 oz., 55 cts.; 12 oz., 1.00.

Pair SHAFT ANTI-RATTLER Springs (warranted) mailed for thirty cents in dimes or stamps. Throw away worthless rubbers, *and relieve your mind.* (Agencies given).
A. G. Morey & Co., La Grange, Ill.
Name this paper.

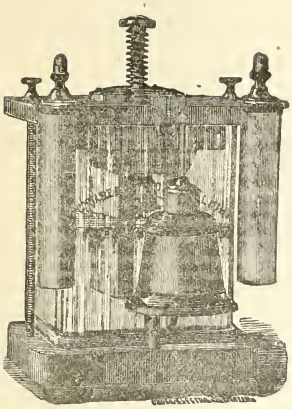
SKELETONS WELL CLEANED.

ARTICULATED AND DISARTICULATED.

——FOR SALE CHEAP.——

CORRESPOND WITH ALBERT BECK,
JANITOR ST. LOUIS MEDICAL COLLEGE.

SEVENTH & MYRTLE, ST. LOUIS, MO.



PORTABLE ELECTRIC LIGHTER,

Price $5.00.

A scientific and economical apparatus for lighting for Home, Business, Office, Mining and Manufacturing purposes. **Complete in itself.** The Electric Current being produced by chemical action. This apparatus by our adjustments, for which we make extra charges, can be adapted to use as a Burglar Alarm, Medical Battery, Call Bell, or for Automatic Gas Lighting. Our burglar alarm is so constructed that the Intruder is immediately confronted with a light and a bell alarm at the same instant. Reliable agents wanted all over the country. Enclose stamp for circular PORTABLE ELECTRIC LIGHT CO., 22 Water Street, Boston. Chartered under the laws of Massachusetts, December, 1882.

"A Portable Electric Lighter for $5 is being extensively sold by the Portable Electric Light Co., of 22 Water Street, Boston. It is an economical and safe apparatus for lighting for home and business purposes."—Scientific American, New York, December 16, 1882.

A DESIRABLE LOCATION FOR A PHYSICIAN.

This Rare Chance can now be Secured by the Purchace of a Physician's Residence, located in a Pleasant Village in Southern Illinois, at Reasonable Terms, and below Original Cost of Property. An actual introduction into a Practice of from $4,000 to $5,000 per year and Reliable Acquaintance with best Families of the Location will be given the Purchaser.

Address Editor St. Louis Medical and Surgical Journal, or M. E. H., New Athens, Ill., Box 140.

The College for Medical Practitioners,

1225 Washington Ave., St. Louis, Mo.

Organized March 21, 1882. *Incorporated April, 11, 1882.*

1883-1884.

FOURTH SESSION TO COMMENCE OCTOBER, 1883.

COURSE OF LECTURES

BY FACULTY MEMBERS.

Prof. Thos. F. Rumbold, on Diseases of the Nose, Throat, Ears, Lungs and Heart, 2622 Washington Avenue., Dean.

Prof. Edw. Borck, A. M., Surgery, 1225 Washington Avenue, Secretary.

Prof. Fred. T. Ledergerber, on History of Medicine and Law, and on Law, 29 South Fourth Street, Treasurer.

Prof. J. H. McIntyre, A. M., on Surgical and Medical Diseases of Women, and Clinical Gynæcology, 2801 Morgan Street.

BY HONORARY MEMBERS.

Prof. B. Roemer, on Diseases of the Nervous system and Venereal Diseases, 1341 Morton Street.

Prof. Hiram Christopher, A. M., on Medical Chemistry and Urinology, St. Joseph, Mo.

Prof. Garland Hurt, on Etiology Hygiene and Management of Diseases, 1210 Olive Street.

BY ASSOCIATE MEMBERS.

A. H. Ohmann-Dumesnil, A. M., M. D., on Skin Diseases, 603 Walnut Street.

A. E. Prince, A. M., M. D., on Operative Opthalmology, with Demonstrations, Jacksonville, Illinois.

H. Marks, M. D., Demonstrator of Anatomy, 1407 Monroe street.

A. Luleff, M. D., Assistant Demonstrator, 817 South Sixth Street.

BY SPECIAL LECTURERS.

W. W. Watkins, M. D., on the Diagnosis of Children's Diseases, 603 Walnut Street.

Meyer J. Epstein, M. D., Prof. of Anatomy, 2610 Pine Street.

CLINICS DAILY.

The re-union dinner will be on the first Monday of the Session, at 4 P. M., at the College building.

FEES—SESSION, - - - - - - - - - - - - $30.00

DIPLOMA OF ASSOCIATE MEMBERSHIP, - - - - - - 25.00

Under the rules confers life, membhrship, *i. e.*, free attendance.

DEMONSTRATOR'S TICKET, - - - - - - - - - 10.00

ANATOMICAL MATERIAL, EXTRA.

FREE—CERTIFICATE OF ATTENDANCE.

OTHER INFORMATION WILL BE FURNISHED BY THE OFFICERS OF THE COLLEGE ON APPLICATION.

ATTENDANTS FOR THE SESSIONS OF 1882-83.

NAME.	ADDRESS.	PRACTICE.
Anton Luleff, M. D.,	St. Louis, Mo.,	11 years.
Henry Marks, M. D.,	"	9 "
Edwin Bosse,	"	med. student.
Wm. A. McMurray, M. D.,	"	47 years.
A. B. Barbee, M. D.,	"	39 "
Frank M. Rumbold,	"	med. student.
Harris T. Garnett, M. D.,	Keytesville, Mo	20 years.
Jno. J. Rothfeld, M. D.,	St. Louis, Mo.,	40 "
R. M. Jordan, M. D.,	"	30 "
Alex. J. Mullen, M. D.,	"	39 "
Jas. W. Thrower, M. D.,	"	10 "
A. H. Ohmann-Dumesnil, M. D.,	"	3 "
I. J. Barenburg, M. D.,	"	6 "
Wm. Standing, M. D.,	"	

NAME.	ADDRESS.	PRACTICE.
A. Ostertag, M. D.,	St. Louis, Mo.,	15 years.
O. B. Hicklin, M. D.,	Elk Lick Sp's, Mo.,	8 years.
P. W. Logan, M. D.,	Standford, Ky.,	22 "
M. A. Grennore, M. D.,	St. Louis, Mo.,	19 "
Thos. J. Banning, M. D.,	Salisbury, Mo.,	20 "
Geo. M. Wilson, M. D.,	Farfield, Ill.	22 "
P. C. Flornroy, M. D.,	Lineus, Mo.,	32 "
Miss M. Grennan, M. D.,	St. Louis, Mo.,	19 "
J. W. Mullen,	"	med student.
Edwin L. Sessions, M. D.,	Whitney, Tex.,	8 years.
G. F. Whitefield, M. D.,	Gr. Ep's., Mich.,	7 "
E. F. Henderson, M. D.,	Lebanon, Mo.	22 "
Miss Eliza Townsend, M. D.,	St. Louis,	12 "

PRIVATE INSTRUCTION

ON THE

DISEASES OF THE NOSE, THROAT & EARS.

Dr. Thos. F. Rumbold will give Private Instruction to Physicians, on the Hygienic, Therapeutic and Operative Management of Catarrhal Diseases of the Nose Throat and Ears.

The successful management of this most common and most tenaceous disease, depends largely upon the skill and tact of the physician in handling his instruments, as well as in knowing how to manage his patient so that the remedies may be thoroughly yet pleasantly applied. To best acquire this, he should see the applications made, and then make them himself under the instruction of an experienced operator, otherwise he may be compelled to pass many months in experimenting on his patients; the failure that is sure to follow such a practice, will be liable to injure his reputation.

Pupils will have the opportunity to examine and treat patients during the Course.

Terms: $50.00 in advance.

For particulars address,

Thos. F. Rumbold, M. D.,
2622 Washington Ave.,
St. Louis, Mo.

PRIVATE INSTRUCTION IN GYNÆCOLOGY.

FOR PHYSICIANS ONLY.

JNO. H. McINTYRE, A. M., M. D.,

Professor of Surgical Diseases of Women and Clinical Gynæcology, St. Louis College for Medical Practitioners, St. Louis, Mo.

Will receive a limited number of Private Pupils, who will have access to his large Clinic.

Course, One Month; Fees, $50.00.

For particulars address, Jno. H. McIntyre, M. D.,
at 2801 Morgan St.,
St. Louis, Mo.

PREFACE

TO DR. RUMBOLD'S HYGIENE AND TREATMENT OF CATARRH.

The theory and practice contained in this work, is the product of over twenty years of continuous labor, observation and study.

I had been but a few years in the practice of this specialty, when I discovered that the successful management of this common and tenacious complaint, depended on the faithful observance of the laws of health by my patients. I soon found, also, that even after they had recovered as completely as it was possible for them to do, the continued observance of these hygienic rules were required, in order to maintain their health.

It is absurd to think that a patient can be successfully treated, while he continues to violate the laws of health. One might as consistently ask a physician to cure him of a burn, while he continues to expose himself to the fire, as to ask to be relieved of a catarrh, while he neglects to employ the means to prevent a renewal of its cause.

For these reasons, I commenced in 1862, to give such rules to my patients as observation had taught me were useful in aiding them to take care of themselves during those seasons of the year in which they were most liable to take cold. These rules I have given in chapters; to these chapters I have added several others on Sanitary Measures, embracing the following subjects: Cleansing the nasal and aural passages; care of the teeth; attention to the surface of the body, and the mental and physical effects of tobacco. I have also added a chapter, detailing what should be done in the event of a cold being taken.

I do not claim that what is written here on hygienic and sanative measures are new, but I do say that it has not been given with sufficient detail and earnestness by any writer on this subject.

Although I have done my utmost to indicate as plainly as possible, the proper management of every phase of this disease, giving three chapters containing the histories of more common cases and their treatment, yet those who expect that this book will enable them to treat successfully *every* case, will be mistaken. The circumstances surrounding each patient are different from those of every other patient, making it necessary that each case should be studied by itself. The management of this disease cannot be learned in a short time.

Having gone entirely out of the beaten track, with respect to the method of making local applications, I may have been too regardless of long established practices. This, however, I leave to the general profession, who, after all, are the TRUE CRITICS. Their almost universal dissatisfaction with the prevailing methods, will soon lead them to ascertain for themselves, whether, what I have reccommended is an improvement or merely a change.

My remarks against the employment of the Eustachian catheter may grate upon the ears of some of my brother practitioners. My reason for discontinuing its use almost entirely is because it has been superceded by methods that are not at all irritating. It would not surprise me if Politzer's and Gruber's methods would place the Eustachian catheter in the drawer where we preserve our discarded instruments.

Should my description of the "Patency of the Eustachian Tube" not be explicit enough to ensure the consideration of this disease in works on Otology, other writers will soon supply the deficiency, as the complaint is not an uncommon one. I wish to record my opinion that the phenomena attending this disease will prove that the present views of the functions of the Eustachian tubes are erroneous.

I fully believe that what I have said on chronic catarrhal inflammation of the nasal passages preceding all catarrhal diseases of the respiratory tract, ear and eyes; on the liability of this inflammation giving rise to diseases in other parts of the organism that are intimately connected with the nasal cavities by nerves; on the paramount importance of hygienic measures; on the great advantage of treating all catarrhal mucous membrane with non-irritating remedies by mild methods; on the spray producer being the only instrument that should be used to make applications to the enflamed mucous membrane; on the possibility of successfully treating the majority of laryngeal troubles by applying remedies to the pharyngo-nasal cavity alone; on the importance of making ocular and aural examination of the ear at the same time, by means of the Acoutoscope; on the certainty of detecting a perforation of the membrana tympani by the tuning fork; on the advantage gained by maintaining a perforation of the membrana tympani to insure a more thorough treatment of the Eustachian tube and the middle ear; and on the functions of the uvula, the azygos prominence, the Eustachian tube and the mastoid cell, will stand the test of close examination, and will be accepted by the profession in a few years.

If it is urged against me, that I have differed very materially from many who are recognized by the profession as being well informed on this subject, I have only to say that what has been given here, is the result of an honest search after facts, and that these facts are stated as I saw them, not fearing to question the correctness of long acknowledged theories, my only guide being my patients' reports—THIS HAS BEEN MY EDUCATOR.

It is conceded by all who have had extensive experience in operative procedure requiring the use of a large variety of instruments, that it is an important means of securing success to have every thing so arranged, that the operator may have the greatest facility for making examinations, applications, etc. With this end in view I have spared no pains to make the armamentarium of my office, including my operating table, as perfect and convenient as possible. It has been my aim to simplify the methods of cleansing and of making applications, but I have not sacrificed thoroughness for simplicity, nor have I sacrificed mildness for any other quality.

The substance of what is said against the use of the Weber douche, I read before the St. Louis Medical Society in September, 1868. The spray producers were presented to the society—after I had used them for three years—in 1869; in Aug., 1868, I gave to Prof. Jno. T. Hodgen, (Professor of Surgery in the St. Louis Medical College) my views concerning the function of the Eustachian tube, saying that Toynbee, Troltsch, Roosa and others were in error when they said that the supply of air to the middle ear took place during the act of deglutition only, and that the observations, made repeatedly by myself, proved that air continuously enters the middle ear, also that the air in this cavity was always in a *rarefied* condition. In September of that year, I read to Prof. Hiram Christopher, of Independence, Mo. the cardinal points of what is contained in the chapters of the Functions of the Eustachian tube. The whole subject was read before our society in 1872. The chapter on the Function of the uvula and azygos prominence was also read before this society in 1876.

The illustrations, with the exception of the section of the ear, which is taken from Henle, are original. It was not thought necessary to state under each illustrated instrument, "the author, etc.," although every one of them are of my own invention.

Many may think that I have been too prolix on some points, but now that my book is in type, I fear that I have not been as definite as the importance of many of the subjects demanded.

T. F. R.

1225 Washington Avenue
January, 1881.

FOOD PRESERVATION.

To the Medical profession:

We desire to call the attention of the medical profession to a practical and successful Food Preservative, which has been perfected by Prof. R. F. Humiston, of Boston, and called REX MAGNUS or the Humiston Food Preservative. This is perhaps a fanciful and high sounding title, but it is not inappropriate. It is indeed a "Mighty King," for it conquers TIME.

REX MAGNUS *does absolutely preserve* meat, game, poultry, fish, milk, cream, butter, eggs, vegetable juices and fluid extracts in their natural state, in all seasons and climates, perfectly fresh and sweet and for any reasonable time, while at the same time it ripens and makes meats better.

Solid Scientific Testimony.

Prof. Samuel W. Johnson, the well known chemist, and for more than 25 years identified with the Scientific Department of Yale College furnishes the following report concerning Rex Magnus:

"My tests of 35 days in days mean temperature of 70°, on meats &c., bought in open market have certainly been severe and I am satisfied that the different brands of Rex Magnus, The Humiston Food preservative, with which I have expermented, *have accomplished all claimed for them.* So far as I have yet learned, *they are the*

ONLY PREPARATIONS THAT ARE EFFECTIVE,

and at the same time practicable, for domestic use. At the banquet on "treated" meats at the New Haven House *I could not distinguish between those which had been sixteen days in my laboratory and those newly taken from the refrigerator of the hotel.* The oysters were perfectly palatable and fresh to my taste, and better, as it happened, than those served at the same time, which were recently taken from the shell. The roast beef, steak, chicken, turkey, and quail *were all as good as I have ever eaten."*

Rex Magnus is *safe, tasteless, pure,* and Prof. Johnson adds in his report. "I should anticipate *no ill results* from its use and consider it *no more harmful than common salt."*

Invisible Agents of Disease.

It is well known to the medical profession, and to scientists generally, that there exists in the air myriads of reproductive organisms, representing the lowest forms of vegetable and animal life. They are abundant at all seasons, but more especially during the hottest part of the year. These sporules and germs, as algæ, fungi, torulæ, bacteria, vibrios, etc., though invisible to the naked eye, are now recognized as not only the great cause of fermentative changes, putrefaction and decay, but they are also regarded as the prolific source of many of the inflammatory and purulent diseases. The "septic" or putrefactive changes in animal and vegetable matter, are principally due to these invisible agents, which precede and accompany chemical action.

So Simple a Child Can Use.

REX MAGNUS is a simple and harmless combination of antiseptics and performs its work by destroying or holding in check these minute organisms. It is perfect in construction and always successful in use when applied according to the directions, which are so simple that a child can follow them. It is compounded on strictly scientific principles from pure and harmless ingredients, directly with a view to the uses for which it is intended.

How to Get It.

The proprietors of this great discovery are desirous that it should be thoroughly investigated by the medical profession throughout the country and will send a sample pound free to every physician who will agree to test it.

It is a great auxiliary of Health. Composed as it is of perfectly pure ingredients, it will not injure the most delicate system, and by counteracting the principles of decay and putrefaction it renders the food wholesome and healthful. It is therefore a great boon to invalids not only for this reason but because it also

Destroys Any Hidden Germs

of disease and averts the dangers which would arise from their being taken into the weak and enfeebled system.

There have been at different times several worthless mixtures offered to the public, which have pretended to accomplish this great result, but they have signally failed. This is probably because their projectors have tried to preserve everything with one compound. A really scientific man would know better than this.

Different Brands Necessary.

The various kinds of food differ in their nature, character and component parts, and for their sure and safe preservation different antiseptics are required. Prof. Humiston has kept this point in view and for the various classes of food the company makes nine different preparations or brands of REX MAGNUS. They do not claim that what is designed for one thing will preserve another, nor do they claim for any of their preparation any more than they will perform.

Names and Prices.

The various brands and their retail prices are as follows: "Viandine" for preserving meats, poultry, fish and game, 50 cents per lb. "Ocean Wave" for oysters, clams, lobsters, fish &c., 50 cents per lb. "Pearl" for cream, $1.00 per lb. "Snow flake" for milk, butter and cheese, 50 cents per lb. "Queen" for eggs, $1.00 per lb. "Aqua Vitae" for medical purposes and for keeping fluid extracts, $1.00 per lb. "Anti-Ferment," "Anti-Mold," Anti-Fly, 50 cents each.

THE HUMISTON FOOD PRESERVING CO.,
72 KILBY ST., BOSTON, MASS.

THE SAINT LOUIS

MEDICAL AND SURGICAL JOURNAL.

TERMS $3.00 PER ANNUM; SINGLE COPIES 10 Cts.

This is the Oldest and Largest Medical Journal for $3.00 in the United States, and it has a more prominent and larger circulation than any two Medical Journals of the Regular Profession in the West, making it the Leading and Representative Medical Periodical in this part of the Country. It is now, and has been for five years, the official Organ of the St. Louis Medical Society. The Proceedings of this Society are so valuable that I insert from 48 to 56 pages each issue. The views represented, are the very latest and the most important to the general practitioner.

I have made special arrangements for full reports from Eastern Medical Societies. These also contain the latest information on the subjects mentioned.

In a short time I will commence the publication of illustrated articles on the Diseases of the Nose, Throat and Ears. As these complaints are very common, every practitioner will be compelled to know something about them and know how to treat them. The articles mentioned will be almost entirely clinical and will contain full account of treatment.

Address all Business Communications to F. M. RUMBOLD,
Business Manager.
2622 Washington Ave., St. Louis, Mo.

THOS. F. RUMBOLD, M. D., Editor and Proprietor.
2622 Washington Ave., St. Louis, Mo.

FE[illegible]'S' HYPO-PHOS-PHITES

Contains [illegible]E ESSENTIAL ELEMENTS to the Animal Organization—
[illegible]sh and Lime;

[illegible]Th[illegible] [illegible]YDIZING AGENTS—Iron and Manganese;

[illegible]NICS—Quinine and Strychnine;

[illegible]and the VITALIZING CONSTITUENT—Phosphorus,
Combined in the form of a Syrup, with *slight alkaline reaction.*

IT DIFFERS IN EFFECT FROM ALL OTHERS, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

IT HAS SUSTAINED A HIGH REPUTATION in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

ITS CURATIVE PROPERTIES are largely attributable to Stimulant, Tonic, and Nutritive qualities, whereby the various organic functions are recruited.

IN CASES where innervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

IST ACTION IS PROMPT, stimulating the appetite, and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

THE PRESCRIBED DOSE produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of mental and nervous affections.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Each Bottle of Fellow's Hypophosphites contains 128 doses.

Prepared by JAMES I. FELLOWS, Chemist,

48 VESEY STREET, NEW YORK.

Circulars and Samples sent to Physicians on appliction.

☞SPECIAL TO PHYSICIANS.—ONE large bottle containing 15 oz. (which usually sells for $1.50) will be sent upon receipt of **Fifty Cents** with the application, this will be applied to the prepayment of Expressage, and will afford an opportunity for a thorough test in Chronic cases of Debility and Nervousness. Express charges prepaid upon all samples.

FOR SALE BY ALL DRUGGISTS.

FINE PHARMACEUTICAL PRODUCTS

FROM THE LABORATORY OF

PARKE, DAVIS & CO.

DETROIT, MICH., U. S. A.

New York: 60 Maiden Lane, and 21 Liberty St.

Standard pharmacetical preparations of the United States and foreign Pharmacopœias, and non-officicial preparations of large variety. Of the latter class we make a specialty of Fluid Extracts prepared from new and rare drugs from various parts of the world.

FLUID AND SOLID EXTRACTS.
SUGAR AND GELATINE COATED PILLS.
ELIXIRS, WINES, SYRUPS.
RESINOIDS AND CONCENTRATIONS.
EMPTY GELATINE CAPSULES.
SOFT FILLED CAPSULES.

NEW DRUGS,

FLUID EXTRACTS.

Aceitillo Bark.
Adrue.
Ailantus Glandulosa.
Alligator Pear Seads.
Alstonia Constricta, True.
Anagallis Arvensis.
Areca Nuts.
Bamboo Briar Root,
Baycuru Root.
Bearsfoot.
Berberis Aquifolium.
Black Haw.
Blood Flower.
Boldo Leaves.
California Fever Bush.
California Laurel.
Carnauba Root.
Caroba Leaves.
Cascara Amarga.
Cascara Sagrada.
Cedron Seed.
Cereus Bonplandii.
Cerens Grandiflorus.
Cereus McDonaldii.
Cheken.
Chewstick.
Coca Leaves.
Cockle Burr.
Cocolmecan.
Corn Silk.
Coto Bark.
Damiana.
Dita Bark.
Dubosia Leaves.
Elephant's Foot.
Ephedra Antisyphilitica.
Eucalyptus Globulous.
Evening Primrose.
Ginger, Mexican.
Grindelia Robusta.
Griedelia Squarrosa.
Guaco Leaves.
Guarana.
Hellanthella.
Honduras Bark.
Horsemint.
Iron Wood.
Jaborandi.
Jamaica Dogwood.
Jamaica Pimento Leaves
Judas Tree.
Juriballi.
Kamala.
Kava Kava.
Kooso Flowers.
Lilly of the Valley Flws.
Lilly of the valley Root.
Manaca.
Mango Bark.
Mango Fruit.
Manzanita Leaves.
Mercury Weed.
Mistletoe.
Musk Root.
Paraguay Tea.
Pulsatilla.
Quebracho Bark.
Quinine Flowers
Rhus Aromatica.
Sabbatia Campestris.
Sandal Wood.
Sarracenia Flava.
Sassy Bark.
Saw Palmetto.
Shepherd's Purse.
Sierra Salvia.
Stylosanthes.
Sundew.
Thapsia Garganica.
Tomato.
Tonga.
Urechites Suberecta.
Ustilago Maidis.
Vaccinum Crassifolium.
Vervian, White.
Wild Bergamot.
Yerba Buena.
Yerba Del Manza.
Yerba Del Polo.
Yerba Reuma.
Yerba Santa.
Zoapatle.

SUGAR COATED PILLS.

Our list of Sugar Coated Pills of the United and British Pharmacopœias, comprises most of the officinal and popular formulæ known to the profession, to which we have added several new and valuable combinations. Our pills are made entirely by hand, from the purest materials, and are sugar and gelatine coated by the latest and most approved processes. For solubility, regularity of shape, and beauty of finish, they are excelled by none.

IMPORTANT.—Our pills being coated while the mass is yet soft, will remain so for years. To be convinced of their extraordinary solubility, it is only necessary to open a few of them, for instance, quinine, chinchodia, or blue pills, all of which are usually found in the market, hard and insoluble. note also the rapidity with which the coating is dissolved in the saliva.

GELATINE PHARMACEUTICALS.

One of the greatest improvements of modern pharmacy is the use of Gelatine in various forms to render medicines more sightly, and to disguise their nauseous taste. This has given origin to the Gelitine Coated Pill—a full line of which, of similar formulæ to our sugar coated pills, will be found on our list—and also to the Hard, and the Soft Gelatine Capsules. We are dispensing Hard Capsules, empty and filled. The Soft, Elastic Capsules, however, are from the nature of their formation, always filled before leaving our laboratory. These Capsules are so soft and elastic that their walls may be brought into juxtaposition, and yet they will regain their original shape and size when the pressure is removed. This property renders them very easy of deglutition, and they will slip down like an oyster or the yelk of an egg, though the largest of them is about half the capacity of a fluidounce.

SPECIALTIES.

Warburg's Tincture.
Solution of Sicreic Acid.
Nitrite of Amyl Pearls.
Sanguis Bovinus Exsiccatus.
Liquor Acidi Phosphorici.
Liquor Acidi Phosphorici Comp.
Soluble Plastic Capsules
Goa Powder.
Crude Petroleum Mass.
Chian Turpentine.
Concentrated Ext. Witch Hazel.
Morure or Mercurio Vegetal.
Sugar Test Flasks.
Empty Gelatine Capsules.
Liquor Egotæ Purificatus.
Chlor-Anodyne.
Tonga.
Hoang-Nan.
Menhol.
Chaulmoogra Oil.
Gurjun Balsam.